=> d l18 1-23 ibib abs hitstr hitind

L18 ANSWER 1 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:100738 HCAPLUS
DOCUMENT NUMBER: 144:198849
TITLE: Novel dosage form comprising modified-release and immediate-release active ingredients
INVENTOR(S): Vaya, Navin; Karan, Rajesh Singh; Sadanand, Sunil; Gupta, Vinod Kumar
PATENT ASSIGNEE(S): India
SOURCE: U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Ser. No. 630,446.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2006024365	A1	20060202	US 2005-134633		20050519
US 2004096499	A1	20040520	US 2003-630446		20030729
PRIORITY APPLN. INFO.:			IN 2002-MU697	A	20020805
			IN 2002-MU699	A	20020805
			IN 2003-MU80	A	20030122
			IN 2003-MU82	A	20030122
			US 2003-630446	A2	20030729

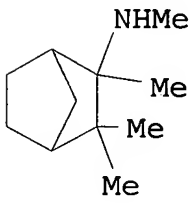
AB A dosage form comprising of a high dose, high soly. active

ingredient as modified release and a low dose active ingredient as immediate release where the wt. ratio of immediate release active ingredient and modified release active ingredient is from 1:10 to 1:15000 and the wt. of modified release active ingredient per unit is from 500 mg to 1500 mg; a process for prepg. the dosage form. Tablets contg. 10 mg sodium pravastatin and 1000 mg niacin were prepd. The release of sodium pravastatin after 24 h was 67.7%, and the release of niacin after 1 h was 84.1%.

IT **826-39-1**, Mecamylamine hydrochloride
(novel dosage form comprising modified-release and immediate-release active ingredients)

RN 826-39-1 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

INCL 424468000

CC 63-6 (Pharmaceuticals)

IT **Gastrointestinal** motility
(effectors; novel dosage form comprising modified-release and immediate-release active ingredients)

IT 511-13-7, Chlophedianol hydrochloride 513-10-0, Echothiophate iodide 514-36-3, Fludrocortisone acetate 514-65-8, Biperiden 517-09-9, Equilenin 518-28-5, Podofilox 520-85-4, Medroxyprogesterone 521-18-6, Dihydrotestosterone 522-48-5, Tetrahydrozoline hydrochloride 523-87-5, Dimenhydrinate 524-83-4, Ethybenztropine 525-26-8, Cloperidone hydrochloride 527-75-3, Berythromycin 528-43-8, Magnolol 528-53-0, Delphinidin 528-96-1, Benzoylpas calcium 530-08-5, Isoetharine 530-78-9, Flufenamic acid 532-03-6, Methocarbamol 533-45-9, Clomethiazole 536-33-4, Ethionamide 536-59-4, Perillyl alcohol 536-93-6, Eucatropine hydrochloride 538-23-8, Tricaprylin 541-15-1, Levocarnitine 541-79-7, Carbocloral 543-82-8, Octodrine 545-80-2, Poldine methylsulfate 547-81-9, 16-Epiestriol 548-04-9, Hypericin 548-57-2, Lucanthone hydrochloride 548-62-9, Gentian violet 548-68-5, Thiphenamil hydrochloride 549-18-8,

Amitriptyline hydrochloride 550-70-9, Triprolidine hydrochloride 550-83-4, Propoxycaine hydrochloride 550-99-2, Naphazoline hydrochloride 551-11-1, Cyclosin 551-48-4, Guanoclor sulfate 552-94-3, Salsalate 554-57-4, Methazolamide 554-92-7, Trimethobenzamide hydrochloride 555-30-6, Methyldopa 555-43-1, Tristearin 555-44-2, Tripalmitin 555-65-7, Brocresine 555-84-0, Nifuradene 557-08-4, Zinc undecylenate 566-48-3, Formestane 569-57-3, Chlorotrianisene 578-95-0D, Acridone, imidazo derivs. 579-56-6, Isoxsuprine hydrochloride 581-88-4, Debrisoquin sulfate 585-86-4, Lactitol 587-61-1, Propyliodone 590-63-6, Bethanechol chloride 595-33-5, Megestrol acetate 596-51-0, Glycopyrrolate 599-79-1, Sulfasalazine 604-75-1, Oxazepam 606-05-3, Pyrabrom 609-78-9, Cycloguanil pamoate 614-39-1, Procainamide hydrochloride 630-56-8, Hydroxyprogesterone caproate 630-93-3, Dilantin 631-06-1, Dexoxadrol hydrochloride 632-00-8, Sulfasomizole 632-99-5, Fuchsin 635-41-6, Trimetozine 636-54-4, Clopamide 637-07-0, Clofibrate 637-58-1, Pramoxine hydrochloride 638-23-3, Carbocysteine 638-94-8, Desonide 645-43-2, Guanethidine monosulfate 646-08-2, .beta.-Alethine 651-06-9, Sulfameter 652-67-5, Isosorbide 653-03-2, Butaperazine 655-05-0, Thozalinone 655-35-6, Chromonar hydrochloride 657-24-9, Metformin 672-87-7, Metyrosine 679-90-3, Roflurane 692-13-7, Buformin 695-53-4, Dimethadione 720-76-3, Fluminorex 723-46-6, Sulfamethoxazole 729-99-7, Sulfamoxole 735-52-4, Cetophenicol 738-70-5, Trimethoprim 739-71-9, Trimipramine 742-20-1, Cyclopenthiazide 747-36-4, Hydroxychloroquine sulfate 749-02-0, Spiperone 749-13-3, Trifluperidol 751-94-0, Fusidate sodium 751-97-3, Rolitetracycline 773-76-2, Chloroxine 777-11-7, Haloprogin 797-63-7, Levonorgestrel 801-52-5, Porfiromycin 804-63-7, Quinine sulfate 808-26-4, Sancycline 811-97-2, Norflurane **826-39-1**, Mecamylamine hydrochloride 829-74-3, Levonordefrin 846-49-1, Lorazepam 846-50-4, Temazepam 847-25-6, Racephenicol 848-75-9, Lormetazepam 852-19-7, Sulfazamet 852-42-6, Guaiapate 860-22-0 881-17-4 886-38-4, Diphencyprone 886-74-8, Chlorphenesin carbamate 894-71-3, Nortriptyline hydrochloride 896-71-9, Tigestol 909-14-8, Costatolide 909-39-7, Opipramol hydrochloride 911-45-5D, Clomifene, analogs 914-00-1, Methacycline 955-48-6, Metalol hydrochloride 956-90-1, Phencyclidine hydrochloride 959-10-4, Xenbucin 962-02-7, Nitrodan 963-39-3, Demoxepam 965-90-2, Ethylestrenol 967-48-6, Flubanilate hydrochloride 968-93-4, Testolactone 969-33-5, Cyproheptadine hydrochloride 972-02-1, Diphenidol 976-71-6, Canrenone 977-79-7, Medrogestone 980-71-2, Brompheniramine maleate 982-24-1, Clopenthixol 983-85-7, Penamecillin 985-16-0, Nafcillin sodium 987-02-0, Demecycline 987-78-0, Citicoline 990-73-8, Fentanyl citrate 1018-71-9, Pyrrolnitrin 1021-11-0, Guanoxyfen sulfate 1038-59-1, Glyoctamide 1050-48-2, Benzilonium bromide 1069-66-5, Valproate

sodium 1070-11-7, Ethambutol hydrochloride 1070-95-7, Guanoctine hydrochloride 1094-08-2, Ethopropazine hydrochloride 1095-90-5, Methadone hydrochloride 1098-60-8, Triflupromazine hydrochloride 1104-22-9, Meclizine hydrochloride 1110-40-3, Cortivazol 1113-10-6, Guancydine 1115-70-4, Metformin hydrochloride 1134-47-0, Baclofen 1143-38-0, Anthralin 1146-98-1, Bromindione 1147-62-2, Pyrovalerone hydrochloride 1150-20-5, Azabon 1151-11-7, Ipodate calcium 1155-03-9, Zolamine hydrochloride 1156-19-0, Tolazamide 1172-18-5, Flurazepam hydrochloride 1173-88-2, Oxacillin sodium 1197-18-8, Cyclocapron 1197-21-3, Phentermine hydrochloride 1199-18-4, Oxidopamine 1211-28-5, Prolintane hydrochloride 1212-72-2, Mephentermine sulfate 1212-83-5, Guanisoquin sulfate 1218-35-5, Xylometazoline hydrochloride 1220-83-3, Sulfamonomethoxine 1225-20-3, Iothalamate sodium 1225-55-4, Protriptyline hydrochloride 1227-61-8, Mefexamide 1231-93-2, Ethynodiol 1232-85-5, Elantrine 1234-71-5, Namoxyrate 1235-15-0, Norbolethone 1242-56-4, Stenbolone acetate 1244-76-4 1252-69-3, Piperamide maleate 1253-28-7, Gestonorone caproate 1263-89-4, Paromomycin sulfate 1264-72-8, Colistin sulfate 1271-19-8, Titanocene dichloride 1314-95-0, Stannous sulfide 1319-82-0, Aminocaproic acid 1321-23-9, Chloroxylenol 1322-14-1, Calcium undecylenate 1323-83-7, Glycerol distearate 1336-78-3, Imidecyl iodine 1392-21-8, Kitasamycin 1397-89-3, Amphotericin B 1400-61-9, Nystatin 1402-82-0, Amphomycin 1403-17-4, Candicidin 1403-71-0, Hamycin 1403-99-2, Mitogillin 1404-00-8, Mitomycin 1404-08-6, Neutramycin 1404-15-5, Nogalamycin 1404-20-2, Peliomycin 1404-48-4, Relomycin 1404-59-7, Rutamycin 1404-64-4, Sparsomycin 1404-88-2, Tyrothricin 1404-90-6, Vancomycin 1404-93-9 1405-00-1, Viridofulvin 1405-20-5, Polymyxinbsulfate 1405-37-4, Capreomycin sulfate 1405-41-0, Gentamicin sulfate 1405-52-3, Sulfomyxin 1405-87-4, Bacitracin 1405-97-6, Gramicidin 1414-45-5, Nisin 1420-03-7, Propenzolate hydrochloride 1420-55-9, Thiethylperazine 1421-14-3, Propanidid 1424-00-6, Mesterolone 1432-75-3, Nitralamine hydrochloride 1456-52-6, Ioprocemic acid 1476-53-5, Novobiocin sodium 1477-40-3, Levomethadyl acetate 1491-81-2, Bolmantalate 1508-65-2, Oxybutynin chloride 1508-75-4, Tropicamide 1508-76-5, Procyclidine hydrochloride 1524-88-5, Flurandrenolide 1538-09-6 1553-34-0, Methixene hydrochloride 1553-60-2, Ibufenac 1597-82-6, Paramethasone acetate 1605-68-1, Taxane 1605-89-6, Bolasterone 1607-17-6, Pentrinitrol 1622-61-3, Clonazepam
(novel dosage form comprising modified-release and immediate-release active ingredients)

L18 ANSWER 2 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:14184 HCAPLUS
DOCUMENT NUMBER: 142:120497

TITLE: Combination liposomal formulations comprising phospholipids
INVENTOR(S): Jamil, Haris; Ahmad, Imran; Ahmad, Zafeer; Anyarambhatla, Gopal
PATENT ASSIGNEE(S): Neopharm, Inc., USA
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005000266	A2	20050106	WO 2004-US16413	20040522
WO 2005000266	A3	20050217		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:		
US 2003-472664P	P	20030522
US 2003-495260P	P	20030813

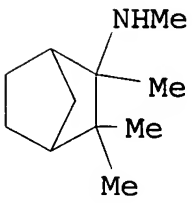
AB The present invention provides a compn. comprising a physiol. acceptable carrier and two or more agents encapsulated in a liposome, wherein the combination of the two or more agents possess the following properties: (1) cytotoxicity to tumor cells, (2) nutritional properties, (3) use in application to nails, hair, skin or lips, or (4) activity against parasites and insects. The invention also provides a method of making such a compn. The invention further provides a method of treating cancer when the combination of the two or more agents is cytotoxic to tumor cells.

For example, an initial formulation of liposome-encapsulated paclitaxel (LEP) was prepd. contg. phosphatidylcholine, cholesterol and cardiolipin. Sucrose and tocopherol were added to the formulation as stabilizers in order to form a sterilized lyophilized cake. Either doxorubicin (0.5 to 1.5 mg/mL) or mitoxantrone (0.5 to 1.5 mg/mL) was dissolved in water, and the soln. was employed to reconstitute the lyophilized LEP cakes. The drug to lipid ratio varied from 1:120 to 1:24 (wt./wt.) for doxorubicin and 1:120 to 1:24 (wt./wt.) for mitoxantrone. The reconstitution of the LEP cake with doxorubicin or mitoxantrone soln. resulted in entrapment of either of the additive drugs (doxorubicin or mitoxantrone) into the liposomal formulation of paclitaxel (LEP). Moreover, 78 to 100% of the additive drug was entrapped into the LEP at a drug to lipid ratio of 1:120 to 1:15 for mitoxantrone and 1:120 to 1:24 for doxorubicin. Presence of an addnl. drug, doxorubicin or mitoxantrone, did not alter entrapment efficiency of paclitaxel in liposomes, size or stability of liposomes. Paclitaxel content remained intact after entrapping mitoxantrone or doxorubicin. This suggested that both drugs can coexist in a single delivery system without compromising size, entrapment efficiency or stability of the liposomal formulation.

IT **826-39-1**, Mecamylamine hydrochloride
(liposomal formulations comprising combinations of biol. active agents)

RN 826-39-1 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

IC ICM A61K009-00

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 18, 62

IT **Intestine**, disease
(Crohn's, agents for treatment of; liposomal formulations comprising combinations of biol. active agents)

IT **Intestine**, neoplasm

(colorectal, treatment of; liposomal formulations comprising combinations of biol. active agents)

IT **Intestine**, disease
(inflammatory, agents for treatment of; liposomal formulations comprising combinations of biol. active agents)

IT Adrenoceptor agonists
Allergy inhibitors
Analgesics
Anesthetics
Anti-Alzheimer's agents
Anti-inflammatory agents
Antiarrhythmics
Antiarthritics
Antibiotics
Anticholesteremic agents
Anticoagulants
Anticonvulsants
Antidepressants
Antidiabetic agents
Antihistamines
Antihypertensives
Antimalarials
Antimigraine agents
Antiparkinsonian agents
Antipsychotics
Antirheumatic agents
Antitumor agents
Antiulcer agents
Antiviral agents
Anxiolytics
Appetite depressants
Cardiovascular agents
Cholinergic agonists
Combination chemotherapy
DNA sequences
Diuretics
Dopamine agonists
Encapsulation
Erythroxylaceae
Fungicides
Gastrointestinal agents
Hemostatics
Hypnotics and Sedatives
Immunosuppressants
Inotropics
Insecticides
Muscarinic antagonists
Muscle relaxants

Nervous system stimulants
Opioid antagonists
Parasiticides
Protozoacides
Psychotropics
Stability
Stabilizing agents
Tranquilizers
Vasodilators
(liposomal formulations comprising combinations of biol. active agents)

IT 50-02-2, Dexamethasone 50-02-2D, Dexamethasone, derivs. 50-03-3, Hydrocortisone acetate 50-04-4, Cortisone acetate 50-18-0, Cytoxan 50-23-7, Hydrocortisone 50-24-8, Prednisolone 50-28-2, Estra-1,3,5(10)-triene-3,17-diol (17.beta.)-, biological studies 50-48-6, Amitriptyline 50-49-7, Imipramine 50-53-3, biological studies 50-56-6, Oxytocin, biological studies 50-57-7, Lypressin 50-78-2, Aspirin 51-21-8, 5-Fluorouracil 51-57-0, Methamphetamine hydrochloride 51-75-2 52-86-8, Haloperidol 53-86-1, Indomethacin 54-71-7, Pilocarpine hydrochloride 55-48-1, Atropine sulfate 55-63-0, Nitroglycerin 55-91-4 56-92-8, Histamine dihydrochloride 57-22-7, Vincristine 57-50-1, Sucrose, biological studies 57-63-6, Ethinyl estradiol 57-83-0, Progesterone, biological studies 57-88-5, Cholesterol, biological studies 57-88-5D, Cholesterol, polyethylene glycol derivs. 58-05-9, Leucovorin 58-18-4, Methyltestosterone 58-25-3, Chlorodiazepoxide 58-55-9, Theophylline, biological studies 58-93-5, Hydrochlorothiazide 59-02-9, .alpha.-Tocopherol 59-05-2, Methotrexate 59-66-5, Acetazolamide 59-92-7, Levodopa, biological studies 59-96-1, Phenoxybenzamine 60-13-9, Amphetamine sulfate 61-68-7, Mefenamic acid 62-51-1, Methacholine chloride 63-84-3 64-86-8, Colchicine 66-75-1, Uramustine 68-23-5, Norethynodrel 69-89-6D, Xanthine, derivs. 71-81-8, Isopropamide iodide 72-33-3, Ethinyl estradiol 3-methyl ether 73-48-3, Bendroflumethiazide 79-93-6, Phenaglycodol 80-74-0, Acetyl sulfisoxazole 80-97-7, Cholestanol 82-66-6, Diphenadione 84-02-6, Prochlorperazine maleate 87-33-2, Isosorbide dinitrate 94-20-2, Chlorpropamide 114-07-8, Erythromycin 114-49-8, Scopolamine bromide 117-37-3, Anisindione 124-94-7, Triamcinolone 127-07-1, Hydroxyurea 147-94-4, Cytarabine 148-82-3, Melphalan 154-93-8, BCNU 298-59-9, Methyl phenidate hydrochloride 299-28-5, Calcium gluconate 299-95-6, Isoproterenol sulfate 302-22-7 302-23-8 315-30-0, Allopurinol 360-68-9, Coprostanol 378-44-9, Betamethasone 439-14-5, Diazepam 472-54-8, 19-Norprogesterone 481-21-0, Cholestane 488-41-5, Mitobronitol 525-66-6, Propranolol 530-78-9, Flufenamic acid 554-57-4, Methazolamide 555-30-6, Methyldopa 576-68-1, Mannomustine 590-63-6, Bethanechol chloride 614-39-1,

Procainamide hydrochloride **826-39-1**, Mecamylamine hydrochloride 834-28-6, Phenformin hydrochloride 865-21-4, Vinblastine 972-02-1, Diphenidol 1104-22-9, Meclizine hydrochloride 1156-19-0, Tolazamide 1179-69-7, Thiethylperazine maleate 1256-86-6, Cholesterol sulfate 1257-78-9, Prochlorperazine edisylate 1319-82-0, Aminocaproic acid 1397-89-3, Amphotericin B 1404-00-8, Mitomycin 1510-21-0, Cholesterol hemisuccinate 1617-90-9, Vincamine 1707-14-8, Phenmetrazine hydrochloride 2644-64-6, Dipalmitoylphosphatidylcholine 3056-17-5, Stavudine 3416-26-0, Lidoflazine 3778-73-2, Ifosfamide 4205-90-7, Clonidine 4310-35-4, Tridihexethyl chloride 4499-40-5, Theophylline cholinate, biological studies 4539-70-2, Distearoylphosphatidylcholine 4891-15-0, Estramustine phosphate 5051-62-7, Guanabenz 5104-49-4, Flurbiprofen 6533-00-2, Norgestrel 7297-25-8, Erythrityl tetranitrate 7689-03-4D, Camptothecin, derivs. 7720-78-7, Ferrous sulfate 9002-60-2, Corticotrophin, biological studies 9002-61-3, Chorionic gonadotropin 9002-62-4, Prolactin, biological studies 9002-64-6, Parathyroid hormone 9002-67-9, Luteinizing hormone 9002-68-0, Follicle-stimulating hormone 9002-71-5, Thyroid stimulating hormone 9002-72-6, Somatotropin 9002-72-6D, Somatotropin, derivs. 9004-10-8, Insulin, biological studies 9005-49-6, Heparin, biological studies 9007-12-9, Calcitonin 9007-92-5, Glucagon, biological studies 9011-97-6, Pancreozymin 9015-94-5, Renin, biological studies 9034-40-6, Gonadotropin-releasing hormone 9034-40-6D, LHRH, agonists and antagonists 10540-29-1, Tamoxifen 11000-17-2, Vasopressin 11056-06-7, Bleomycin 12633-72-6, Amphotericin 12687-37-5, Benzamphetamine 13563-60-5, Norgesterone 13598-36-2D, Phosphonic acid, alkylidenebis- derivs. 13655-52-2, Alprenolol 15663-27-1, Cisplatin 15686-71-2, Cephalexin 15687-27-1, Ibuprofen 16662-47-8, Gallopamil 17688-29-8, Diarachidonoylphosphatidylcholine 17692-38-5, Fluprofen 17902-23-7, Tegafur 18656-38-7, Dimyristoylphosphatidylcholine 18883-66-4, Streptozotocin 20830-75-5, Digoxin 20830-81-3, Daunomycin 22071-15-4, Ketoprofen 22089-22-1, Trifosfamide 22131-79-9, Alclofenac 22204-53-1, Naproxen 23214-92-8D, Doxorubicin, conjugates with polyethylene glycol 23413-80-1, Aluminum aspirin 23541-50-6, Cerubidine 25316-40-9, Adriamycin 26171-23-3, Tolmetin 26839-75-8, Timolol 27790-75-6D, Dihydropyridine, derivs. 29122-68-7, Atenolol 29679-58-1, Fenoprofen 31842-01-0, Indoprofen 33069-62-4, Paclitaxel 33369-31-2, Zomepirac 33419-42-0, Etoposide 36330-85-5, Fenbufen 38194-50-2, Sulindac 38304-91-5, Minoxidil 39562-70-4, Nitrendipine 41575-94-4, Carboplatin 42399-41-7, Diltiazem 42540-40-9, Mandol 51110-01-1, Somatostatin 51481-61-9, Cimetidine 53714-56-0, Leuprolide 54182-58-0, Sucralfate 55985-32-5, Nicardipine

56420-45-2, Epirubicin 57010-31-8, Tiapamil 59695-59-9, Cephalexin hydrochloride 61361-72-6, Dimyristoylphosphatidylglycerol 61825-94-3, Oxaliplatin 61912-98-9, Insulin-like growth factor 63675-72-9, Nisoldipine 65271-80-9, Mitoxantrone 66085-59-4, Nimodipine 66357-35-5, Ranitidine 69539-53-3, Etintidine 69655-05-6, Didanosine 71486-22-1, Vinorelbine 72509-76-3, Felodipine 75847-73-3, Enalapril 76547-98-3, Lisinopril 76824-35-6, Famotidine 76963-41-2, Nizatidine 78415-72-2, Milrinone 79467-23-5, Mioflazine 83688-84-0, Tertatolol 86639-52-3, SN-38 87333-19-5, Ramipril 88150-42-9, Amlodipine 95058-81-4, Gemcitabine 97682-44-5, Irinotecan 108027-43-6, Cyclosporin S 110942-02-4, Proleukin 112887-68-0, Raltitrexed 114977-28-5, Docetaxel 118390-30-0, Consensus interferon 120511-73-1, Anastrozole 123948-87-8, Topotecan 126467-48-9, Porcine growth hormone 154361-50-9, Capecitabine 180288-69-1, Herceptin 214334-87-9, Dioleoylphosphatidylglycerol 257933-82-7, EKB 569 339524-35-5, Cytoxin 823178-25-2 823178-26-3

(liposomal formulations comprising combinations of biol. active agents)

L18 ANSWER 3 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:780526 HCAPLUS
DOCUMENT NUMBER: 141:289059
TITLE: Treatment of **intestinal** conditions with N-2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine
INVENTOR(S): Devane, John
PATENT ASSIGNEE(S): Athpharma Limited, Ire.
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004080446	A1	20040923	WO 2004-IB1134	200403 12
WO 2004080446	B1	20041209		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,

SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2518385	AA	20040923	CA 2004-2518385	200403 12
US 2004209961	A1	20041021	US 2004-798421	200403 12
EP 1603544	A1	20051214	EP 2004-720110	200403 12

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

PRIORITY APPLN. INFO.:	US 2003-454527P	P	200303 14
	WO 2004-IB1134	W	200403 12

AB The invention discloses methods and formulations for reducing, preventing, and/or managing abnormal increases in **gastrointestinal** motility, and **intestinal** conditions that cause the same. Methods of using N-2,3,3-tetramethylbicyclo-[2.2.1]heptane-2-amine and formulations comprising N-2,3,3-tetramethylbicyclo-[2.2.1]heptan-2-amine are included.

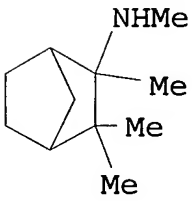
IT **760175-93-7 760175-94-8 760175-95-9**
760175-96-0 760175-97-1 760175-98-2
760175-99-3 760176-00-9 760176-01-0
760176-02-1 760176-03-2 760176-04-3
760176-05-4 760176-06-5 760176-07-6
760176-08-7 760176-09-8 760176-10-1
760176-11-2 760176-12-3 760176-13-4
760176-14-5 760176-15-6 760176-16-7
760176-17-8 760176-18-9 760176-19-0
760176-20-3 760176-21-4 760176-22-5
760176-23-6 760176-24-7 760176-25-8
760176-27-0 760176-28-1 760176-29-2
760176-30-5 760176-31-6 760176-32-7
760176-33-8 760176-34-9 760176-35-0

760176-36-1 760176-37-2 760176-38-3
760176-39-4 760176-40-7 760176-41-8
760176-42-9 760176-43-0 760176-44-1
760176-45-2
(tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

RN 760175-93-7 HCAPLUS
CN 1,6-Hexanediaminium, N,N,N,N',N',N'-hexamethyl-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 60-26-4
CMF C12 H30 N2

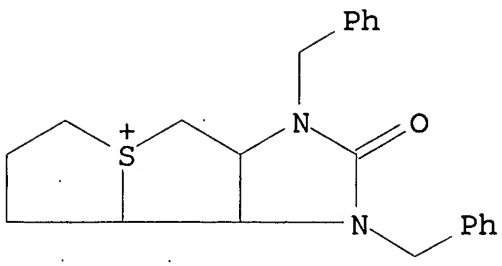
$Me_3{}^+N-(CH_2)_6-N^+Me_3$

RN 760175-94-8 HCAPLUS
CN Thieno[1',2':1,2]thieno[3,4-d]imidazol-5-ium, decahydro-2-oxo-1,3-bis(phenylmethyl)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

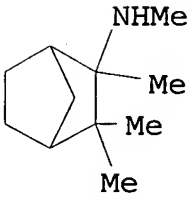
CRN 7187-66-8
CMF C22 H25 N2 O S

Currently available stereo shown.



CM 2

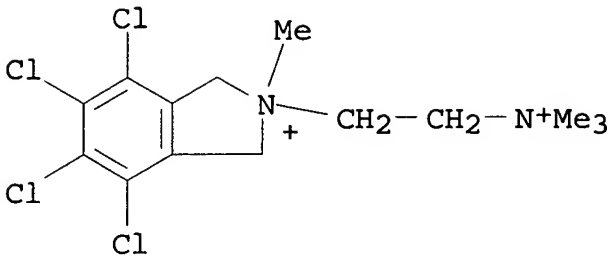
CRN 60-40-2
CMF C11 H21 N



RN 760175-95-9 HCAPLUS
CN 1H-Isoindolium, 4,5,6,7-tetrachloro-2,3-dihydro-2-methyl-2-[2-(trimethylammonio)ethyl]-, dichloride, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

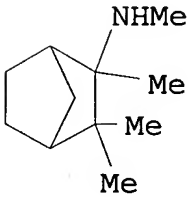
CRN 69-27-2
CMF C14 H20 Cl4 N2 . 2 Cl



●2 Cl⁻

CM 2

CRN 60-40-2
CMF C11 H21 N

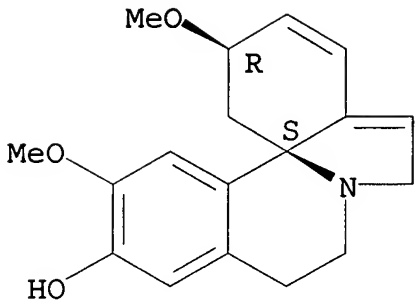


RN 760175-96-0 HCAPLUS
CN Erythrinan-16-ol, 1,2,6,7-tetradehydro-3,15-dimethoxy-, (3.beta.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

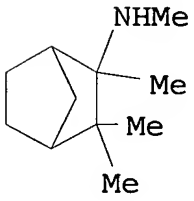
CRN 7290-03-1
CMF C18 H21 N O3

Absolute stereochemistry.



CM 2

CRN 60-40-2
CMF C11 H21 N

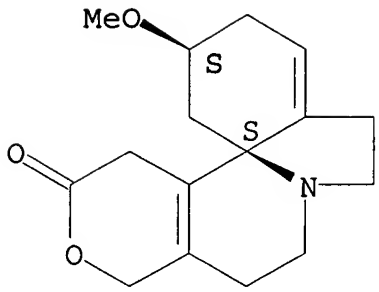


RN 760175-97-1 HCAPLUS
CN 1H,12H-Benzo[i]pyrano[3,4-g]indolizin-12-one, 2,3,5,6,8,9,10,13-octahydro-2-methoxy-, (2S,13bS)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

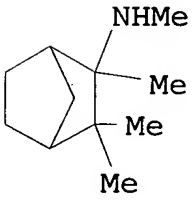
CRN 23255-54-1
CMF C16 H21 N O3

Absolute stereochemistry.



CM 2

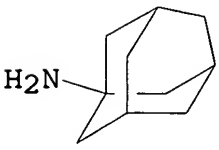
CRN 60-40-2
CMF C11 H21 N



RN 760175-98-2 HCAPLUS
CN Tricyclo[3.3.1.13,7]decan-1-amine, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

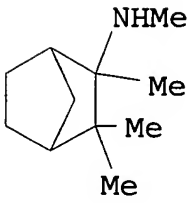
CM 1

CRN 768-94-5
CMF C10 H17 N



CM 2

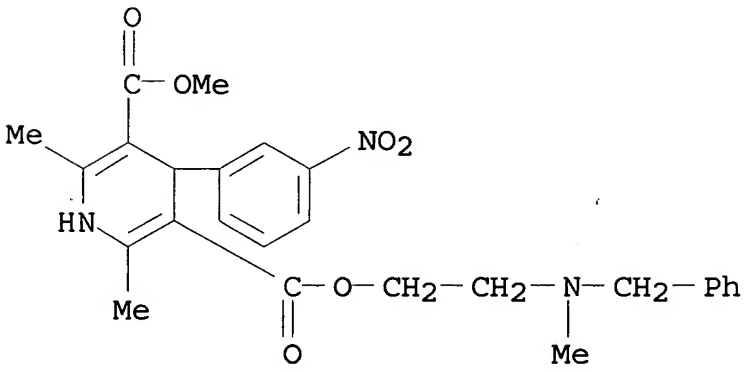
CRN 60-40-2
CMF C11 H21 N



RN 760175-99-3 HCAPLUS
CN 3,5-Pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl)-, methyl 2-[methyl(phenylmethyl)amino]ethyl ester, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

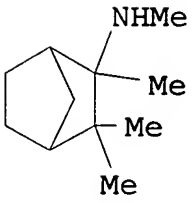
CM 1

CRN 55985-32-5
CMF C26 H29 N3 O6



CM 2

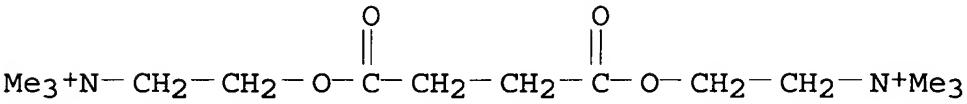
CRN 60-40-2
CMF C11 H21 N



RN 760176-00-9 HCAPLUS
CN Ethanaminium, 2,2'-[(1,4-dioxo-1,4-butanediyl)bis(oxy)]bis[N,N,N-trimethyl-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

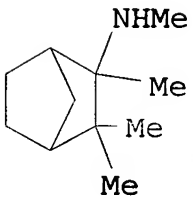
CM 1

CRN 306-40-1
CMF C14 H30 N2 O4



CM 2

CRN 60-40-2
CMF C11 H21 N



RN 760176-01-0 HCAPLUS
CN 1,10-Decanediaminium, N,N,N,N',N',N'-hexamethyl-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

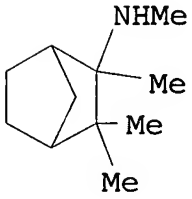
CRN 156-74-1

CMF C16 H38 N2

$Me_3{}^+N-(CH_2)_{10}-N^+Me_3$

CM 2

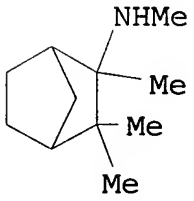
CRN 60-40-2
CMF C11 H21 N



RN 760176-02-1 HCAPLUS
CN 13H-4,6:21,24-Dietheno-8,12-metheno-1H-pyrido[3',2':14,15][1,11]dioxacycloeicosino[2,3,4-ij]isoquinolinium, 2,3,13a,14,15,16,25,25a-octahydro-9,19-dihydroxy-18,29-dimethoxy-1,14,14-trimethyl-, (13aR,25aS)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

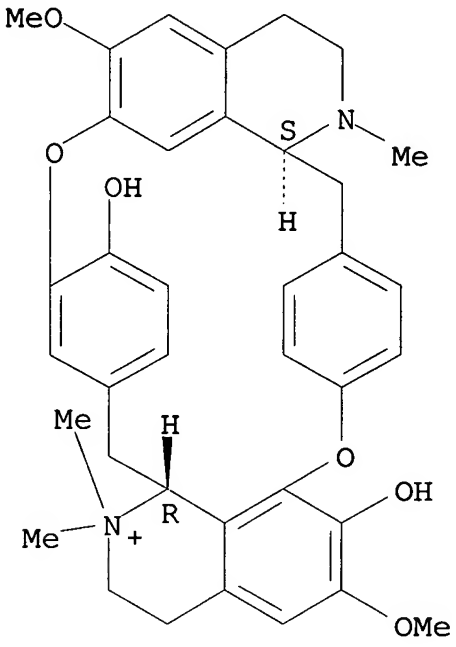
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 57-95-4
CMF C37 H41 N2 O6

Absolute stereochemistry.

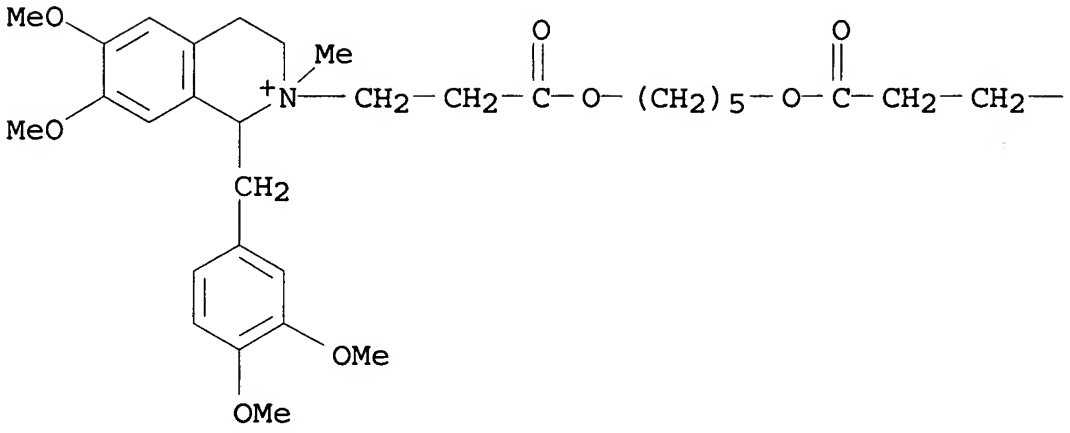


RN 760176-03-2 HCAPLUS
CN Isoquinolinium, 2,2'-[1,5-pentanediylbis[oxy(3-oxo-3,1-propanediyl)]]bis[1-[(3,4-dimethoxyphenyl)methyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

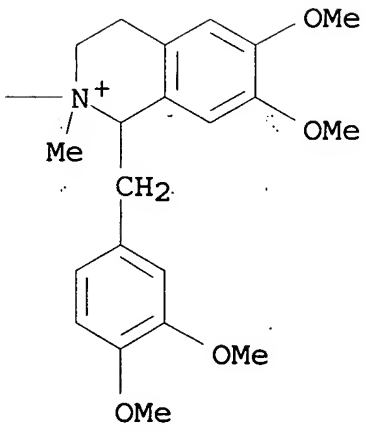
CM 1

CRN 64228-79-1
CMF C53 H72 N2 O12

PAGE 1-A

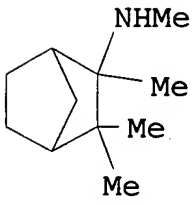


PAGE 1-B



CM 2

CRN 60-40-2
CMF C11 H21 N



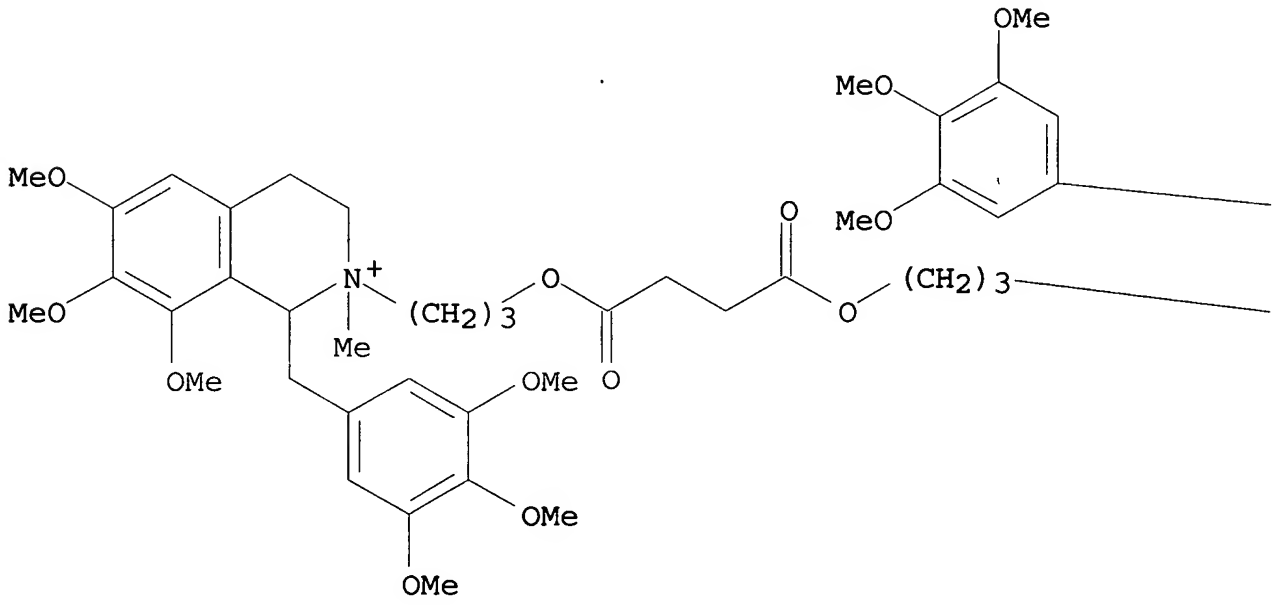
RN 760176-04-3 HCAPLUS
CN Isoquinolinium, 2,2'-[(1,4-dioxo-1,4-butanediyl)bis(oxy-3,1-propanediyl)]bis[1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, (1R,1'R,2S,2'S)-rel-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

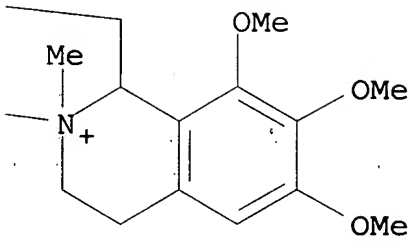
CRN 133814-18-3
CMF C56 H78 N2 O16

Currently available stereo shown.

PAGE 1-A

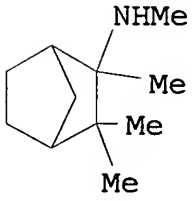


PAGE 1-B



CM 2

CRN 60-40-2
CMF C11 H21 N



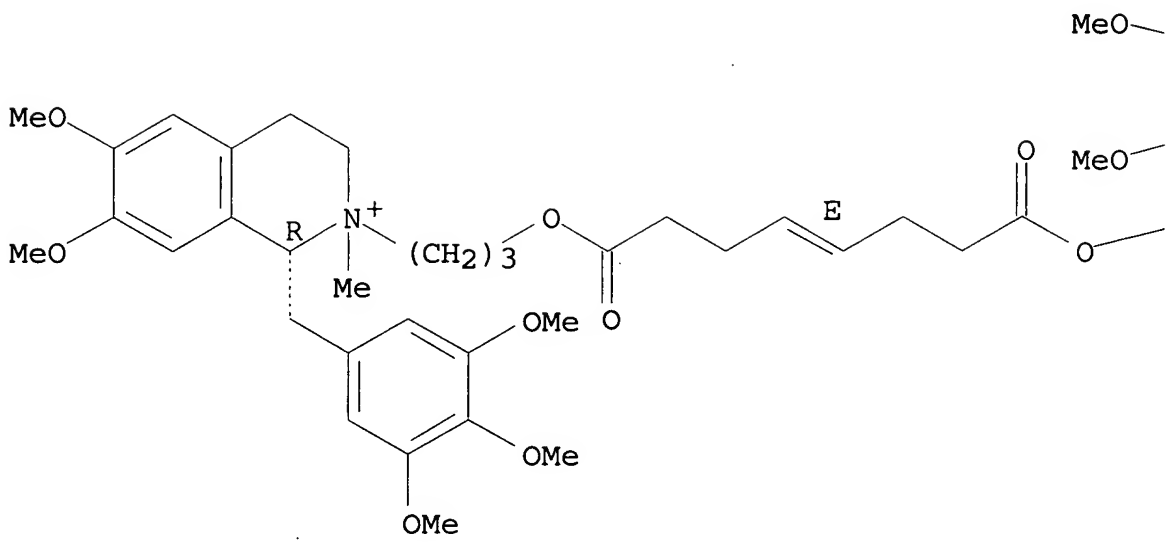
RN 760176-05-4 HCAPLUS
CN Isoquinolinium, 2,2'-[[(4E)-1,8-dioxo-4-octene-1,8-diyl]bis(oxy-3,1-propanediyl)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, (1R,1'R)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

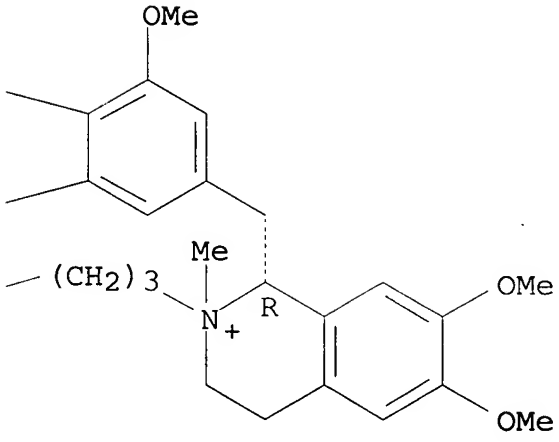
CRN 133814-19-4
CMF C58 H80 N2 O14

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

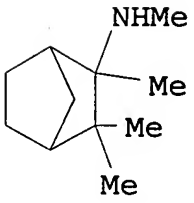


PAGE 1-B



CM 2

CRN 60-40-2
CMF C11 H21 N

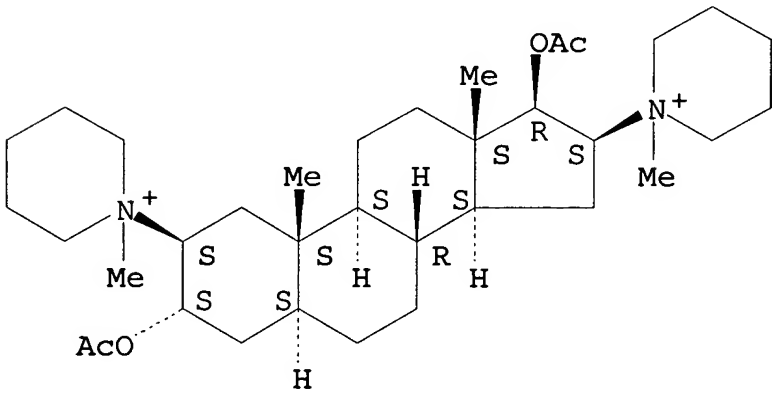


RN 760176-06-5 HCAPLUS
CN Piperidinium, 1,1'-[(2.beta.,3.alpha.,5.alpha.,16.beta.,17.beta.)-3,17-bis(acetyloxy)androstane-2,16-diyl]bis[1-methyl-, dibromide, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 15500-66-0
CMF C35 H60 N2 O4 . 2 Br

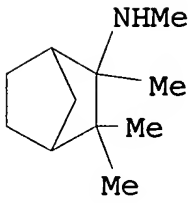
Absolute stereochemistry.



●2 Br⁻

CM 2

CRN 60-40-2
CMF C11 H21 N

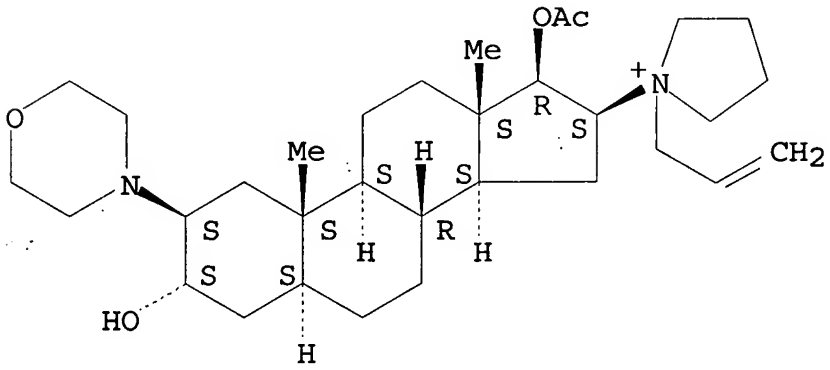


RN 760176-07-6 HCAPLUS
CN Pyrrolidinium, 1-[(2.beta.,3.alpha.,5.alpha.,16.beta.,17.beta.)-17-(acetyloxy)-3-hydroxy-2-(4-morpholinyl)androstan-16-yl]-1-(2-propenyl)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

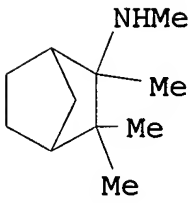
CRN 143558-00-3
CMF C32 H53 N2 O4

Absolute stereochemistry.



CM 2

CRN 60-40-2
CMF C11 H21 N

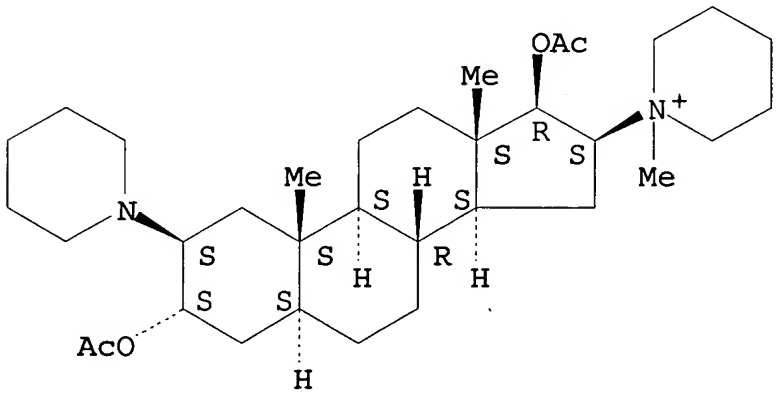


RN 760176-08-7 HCAPLUS
CN Piperidinium, 1-[(2.beta.,3.alpha.,5.alpha.,16.beta.,17.beta.)-3,17-bis(acetyloxy)-2-(1-piperidinyl)androstan-16-yl]-1-methyl-, bromide, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 50700-72-6
CMF C34 H57 N2 O4 . Br

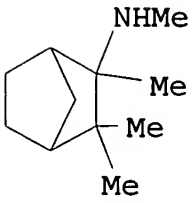
Absolute stereochemistry.



● Br^-

CM 2

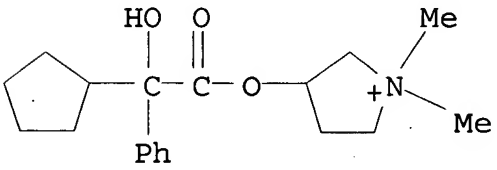
CRN 60-40-2
CMF C11 H21 N

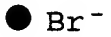


RN 760176-09-8 HCAPLUS
CN Pyrrolidinium, 3-[(cyclopentylhydroxyphenylacetyl)oxy]-1,1-dimethyl-, bromide, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

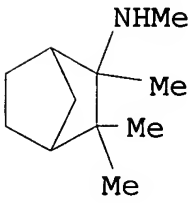
CRN 596-51-0
CMF C19 H28 N O3 . Br





CM 2

CRN 60-40-2
CMF C11 H21 N

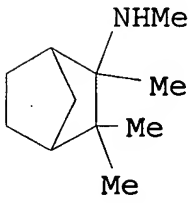


RN 760176-10-1 HCAPLUS
CN Benzeneacetic acid, .alpha.-(hydroxymethyl)- (3-endo)-8-methyl-8-

azabicyclo[3.2.1]oct-3-yl ester, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

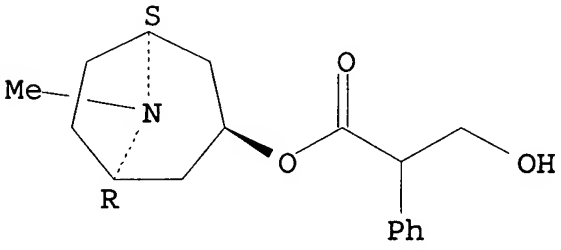
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 51-55-8
CMF C17 H23 N O3

Relative stereochemistry.

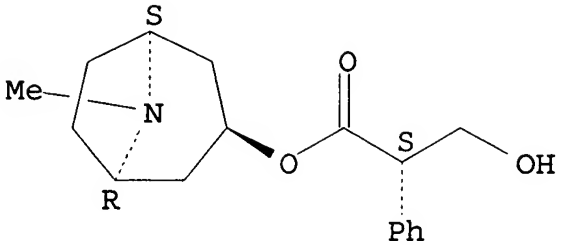


RN 760176-11-2 HCAPLUS
CN Benzeneacetic acid, .alpha.-(hydroxymethyl)-, (3-endo)-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester, (.alpha.S)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

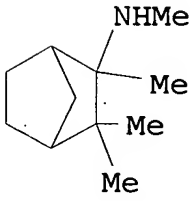
CRN 101-31-5
CMF C17 H23 N O3

Absolute stereochemistry. Rotation (-).



CM 2

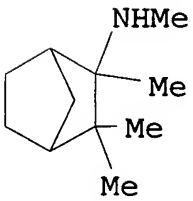
CRN 60-40-2
CMF C11 H21 N



RN 760176-12-3 HCAPLUS
CN Benzeneacetic acid, .alpha.-(hydroxymethyl)-, (1.alpha.,2.beta.,4.beta.,5.alpha.,7.beta.)-9-methyl-3-oxa-9-azatricyclo[3.3.1.02,4]non-7-yl ester, (.alpha.S)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

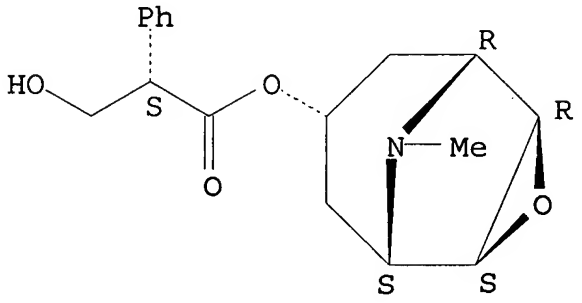
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 51-34-3
CMF C17 H21 N O4

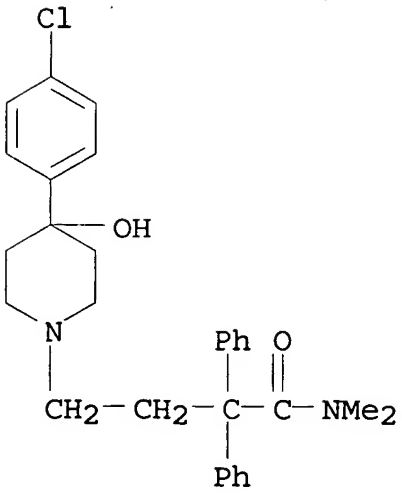
Absolute stereochemistry. Rotation (-).



RN 760176-13-4 HCAPLUS
CN 1-Piperidinebutanamide, 4-(4-chlorophenyl)-4-hydroxy-N,N-dimethyl-.alpha.,.alpha.-diphenyl-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

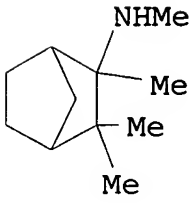
CRN 53179-11-6
CMF C29 H33 Cl N2 O2



CM 2

CRN 60-40-2

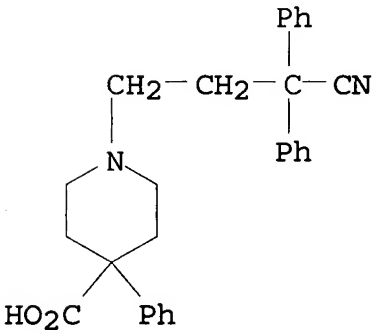
CMF C11 H21 N



RN 760176-14-5 HCAPLUS
CN 4-Piperidinecarboxylic acid, 1-(3-cyano-3,3-diphenylpropyl)-4-phenyl-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

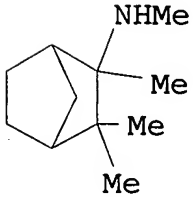
CM 1

CRN 28782-42-5
CMF C28 H28 N2 O2



CM 2

CRN 60-40-2
CMF C11 H21 N

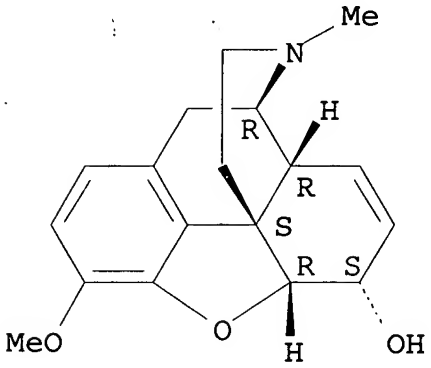


RN 760176-15-6 HCAPLUS
CN Morphinan-6-ol, 7,8-didehydro-4,5-epoxy-3-methoxy-17-methyl-, (5.alpha.,6.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

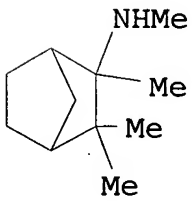
CRN 76-57-3
CMF C18 H21 N O3

Absolute stereochemistry.



CM 2

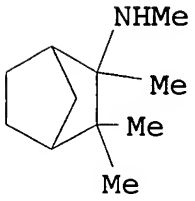
CRN 60-40-2
CMF C11 H21 N



RN 760176-16-7 HCAPLUS
CN Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-(5.alpha.,6.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

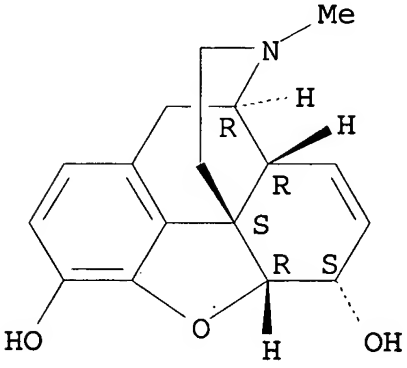
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 57-27-2
CMF C17 H19 N O3

Absolute stereochemistry. Rotation (-).

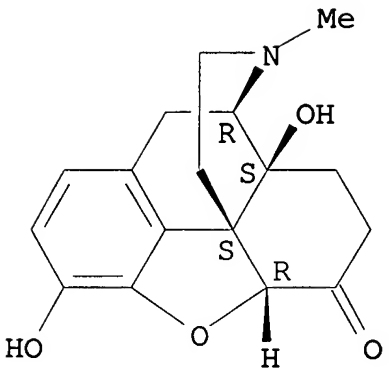


RN 760176-17-8 HCAPLUS
CN Morphinan-6-one, 4,5-epoxy-3,14-dihydroxy-17-methyl-, (5.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

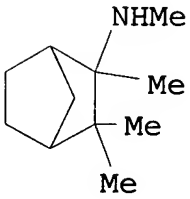
CRN 76-41-5
CMF C17 H19 N O4

Absolute stereochemistry.



CM 2

CRN 60-40-2
CMF C11 H21 N

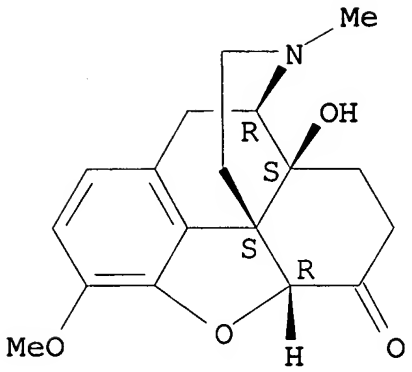


RN 760176-18-9 HCAPLUS
CN Morphinan-6-one, 4,5-epoxy-14-hydroxy-3-methoxy-17-methyl-, hydrochloride, (5.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 124-90-3
CMF C18 H21 N O4 . Cl H

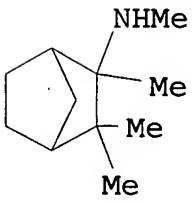
Absolute stereochemistry.



● HCl

CM 2

CRN 60-40-2
CMF C11 H21 N

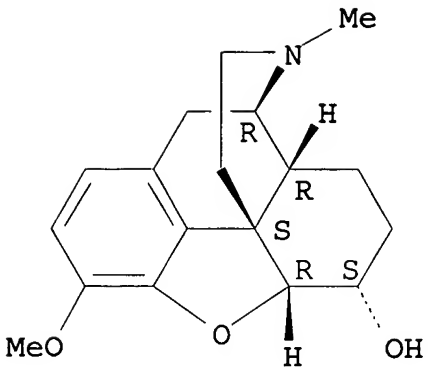


RN 760176-19-0 HCAPLUS
CN Morphinan-6-ol, 4,5-epoxy-3-methoxy-17-methyl-, (5.alpha.,6.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

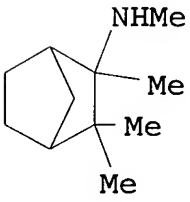
CRN 125-28-0
CMF C18 H23 N O3

Absolute stereochemistry.



CM 2

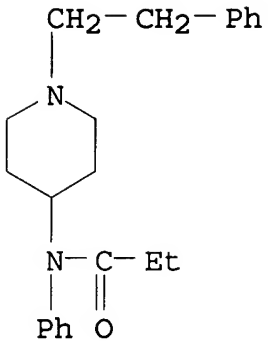
CRN 60-40-2
CMF C11 H21 N



RN 760176-20-3 HCAPLUS
CN Propanamide, N-phenyl-N-[1-(2-phenylethyl)-4-piperidinyl]-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

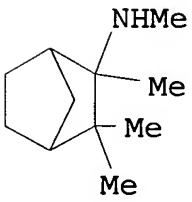
CM 1

CRN 437-38-7
CMF C22 H28 N2 O



CM 2

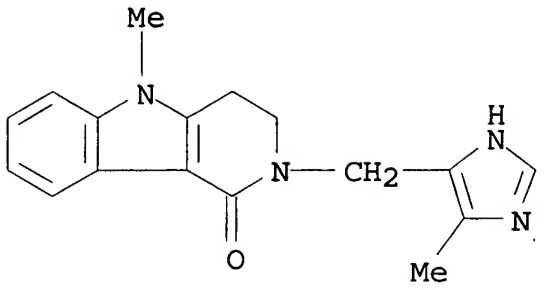
CRN 60-40-2
CMF C11 H21 N



RN 760176-21-4 HCAPLUS
CN 1H-Pyrido[4,3-b]indol-1-one, 2,3,4,5-tetrahydro-5-methyl-2-[(5-methyl-1H-imidazol-4-yl)methyl]-, monohydrochloride, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

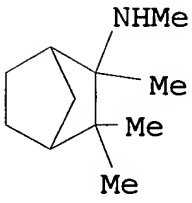
CRN 122852-69-1
CMF C17 H18 N4 O . Cl H



● HCl

CM 2

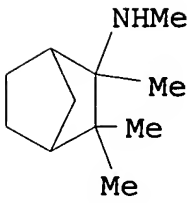
CRN 60-40-2
CMF C11 H21 N



RN 760176-22-5 HCAPLUS
CN Benzeneacetonitrile, .alpha.-[3-[[2-(3,4-dimethoxyphenyl)ethyl]methylamino]propyl]-3,4-dimethoxy-.alpha.-(1-methylethyl)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

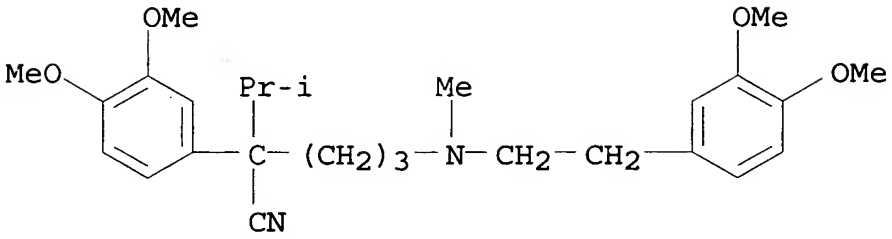
CM 1

CRN 60-40-2
CMF C11 H21 N



CM 2

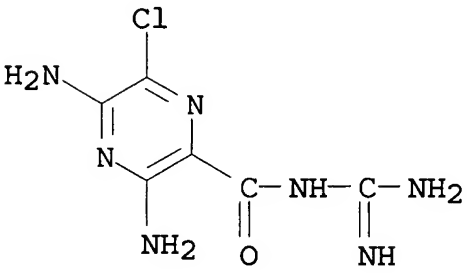
CRN 52-53-9
CMF C27 H38 N2 O4



RN 760176-23-6 HCAPLUS
CN Pyrazinecarboxamide, 3,5-diamino-N-(aminoiminomethyl)-6-chloro-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

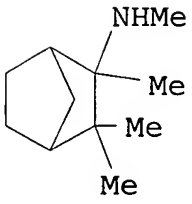
CM 1

CRN 2609-46-3
CMF C6 H8 Cl N7 O



CM 2

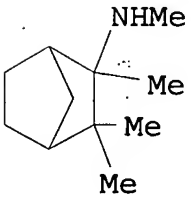
CRN 60-40-2
CMF C11 H21 N



RN 760176-24-7 HCAPLUS
CN Benzoic acid, 5-(aminosulfonyl)-4-chloro-2-[(2-furanylmethyl)amino]-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

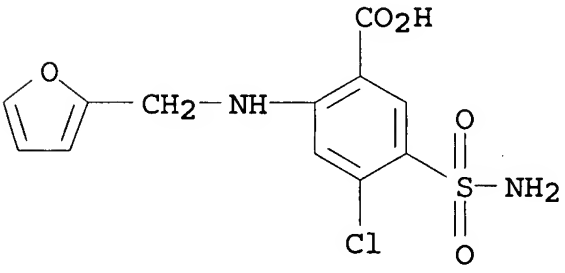
CM 1

CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 54-31-9
CMF C12 H11 Cl N2 O5 S



RN 760176-25-8 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, mixt. with bismuth (9CI) (CA INDEX NAME)

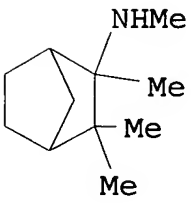
CM 1

CRN 7440-69-9
CMF Bi

Bi

CM 2

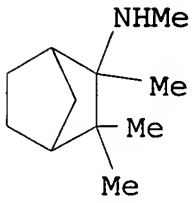
CRN 60-40-2
CMF C11 H21 N



RN 760176-27-0 HCAPLUS
CN L-Cysteinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-[(1R,2R)-2-hydroxy-1-(hydroxymethyl)propyl]-, cyclic (2.fwdarw.7)-disulfide, monoacetate (salt), mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 60-40-2
CMF C11 H21 N

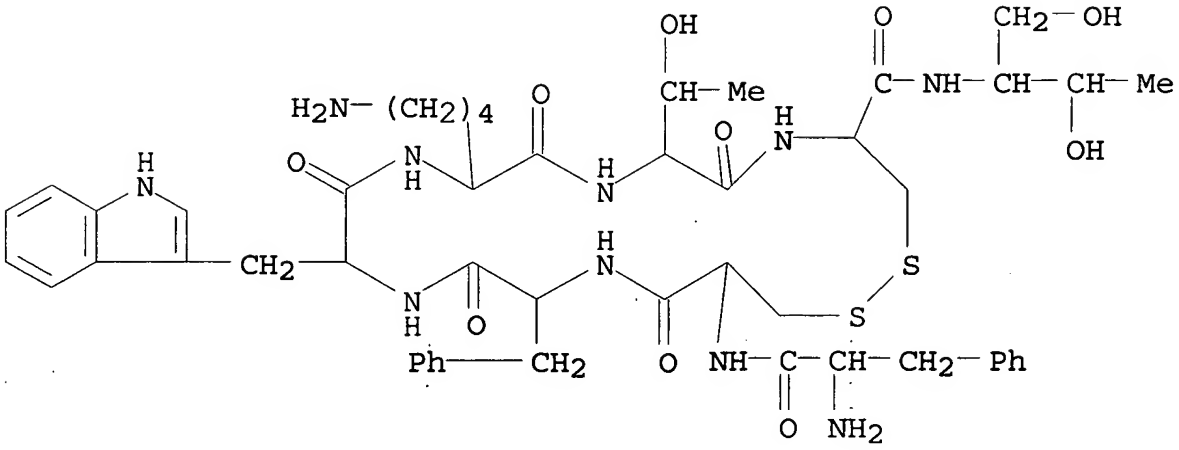


CM 2

CRN 760176-26-9
CMF C49 H66 N10 O10 S2 . C2 H4 O2

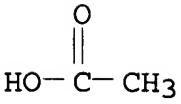
CM 3

CRN 83150-76-9
CMF C49 H66 N10 O10 S2



CM 4

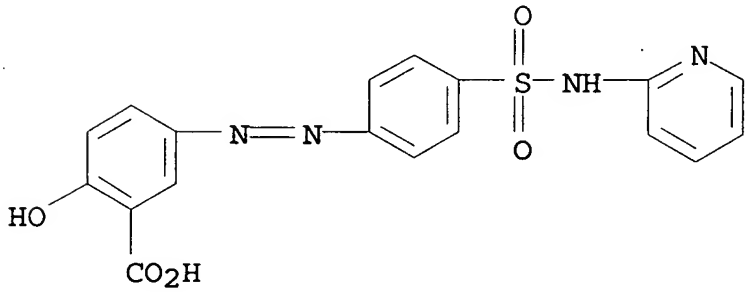
CRN 64-19-7
CMF C2 H4 O2



RN 760176-28-1 HCAPLUS
CN Benzoic acid, 2-hydroxy-5-[[4-[(2-pyridinylamino)sulfonyl]phenyl]azo]-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

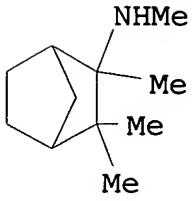
CM 1

CRN 599-79-1
CMF C18 H14 N4 O5 S



CM 2

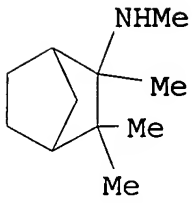
CRN 60-40-2
CMF C11 H21 N



RN 760176-29-2 HCAPLUS
CN Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

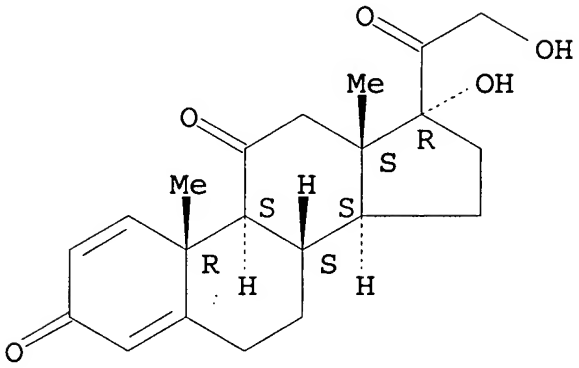
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 53-03-2
CMF C21 H26 O5

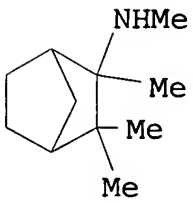
Absolute stereochemistry.



RN 760176-30-5 HCAPLUS
CN Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-, (11.beta.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

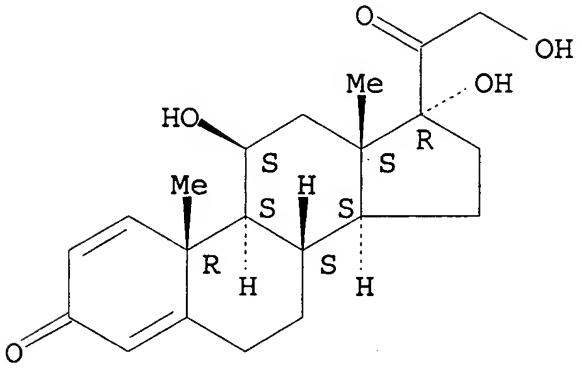
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 50-24-8
CMF C21 H28 O5

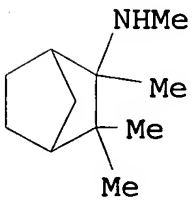
Absolute stereochemistry.



RN 760176-31-6 HCAPLUS
CN Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11.beta.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

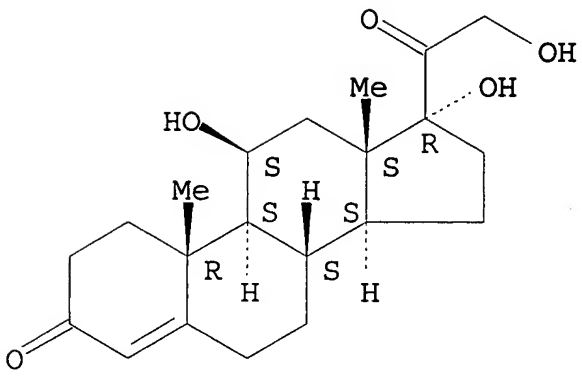
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 50-23-7
CMF C21 H30 O5

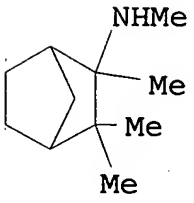
Absolute stereochemistry.



RN 760176-32-7 HCAPLUS
CN Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

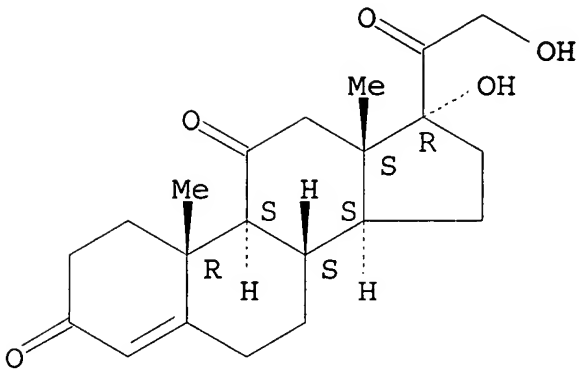
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 53-06-5
CMF C21 H28 O5

Absolute stereochemistry.

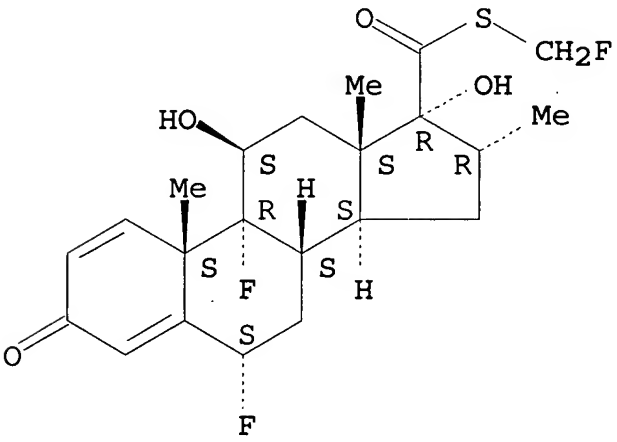


RN 760176-33-8 HCAPLUS
CN Androsta-1,4-diene-17-carbothioic acid, 6,9-difluoro-11,17-dihydroxy-16-methyl-3-oxo-, S-(fluoromethyl) ester, (6.alpha.,11.beta.,16.alpha.,17.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

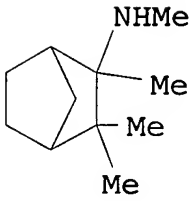
CRN 90566-53-3
CMF C22 H27 F3 O4 S

Absolute stereochemistry.



CM 2

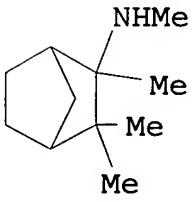
CRN 60-40-2
CMF C11 H21 N



RN 760176-34-9 HCAPLUS
CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-, (11.beta.,16.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

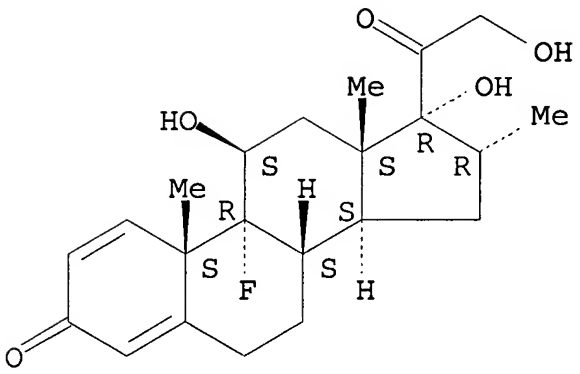
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 50-02-2
CMF C22 H29 F O5

Absolute stereochemistry.

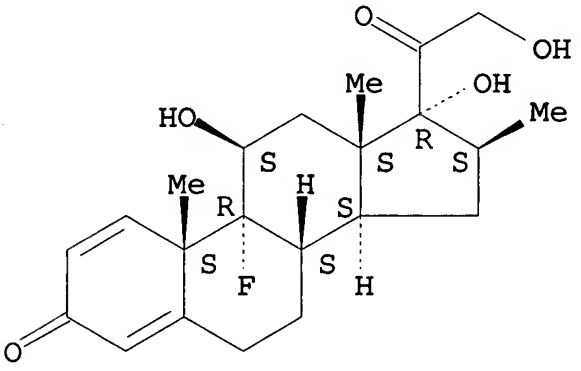


RN 760176-35-0 HCAPLUS
CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-, (11.beta.,16.beta.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

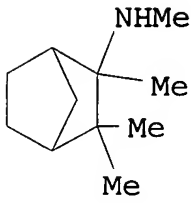
CRN 378-44-9
CMF C22 H29 F O5

Absolute stereochemistry.



CM 2

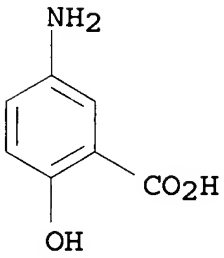
CRN 60-40-2
CMF C11 H21 N



RN 760176-36-1 HCAPLUS
CN Benzoic acid, 5-amino-2-hydroxy-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

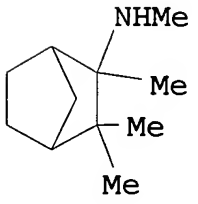
CM 1

CRN 89-57-6
CMF C7 H7 N O3



CM 2

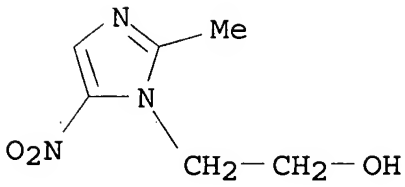
CRN 60-40-2
CMF C11 H21 N



RN 760176-37-2 HCAPLUS
CN 1H-Imidazole-1-ethanol, 2-methyl-5-nitro-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

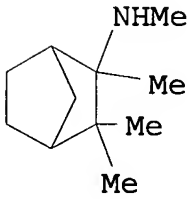
CM 1

CRN 443-48-1
CMF C6 H9 N3 O3



CM 2

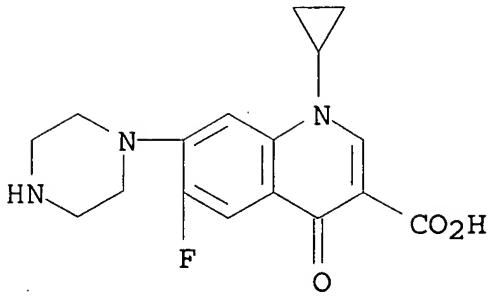
CRN 60-40-2
CMF C11 H21 N



RN 760176-38-3 HCAPLUS
CN 3-Quinolinecarboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-7-(1-piperazinyl)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

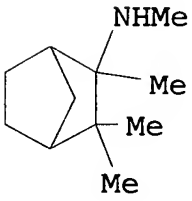
CM 1

CRN 85721-33-1
CMF C17 H18 F N3 O3



CM 2

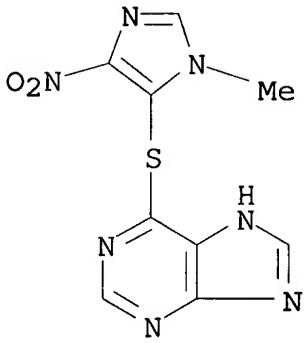
CRN 60-40-2
CMF C11 H21 N



RN 760176-39-4 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, mixt. with 6-[(1-methyl-4-nitro-1H-imidazol-5-yl)thio]-1H-purine (9CI) (CA INDEX NAME)

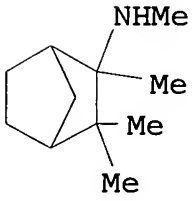
CM 1

CRN 446-86-6
CMF C9 H7 N7 O2 S



CM 2

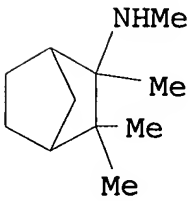
CRN 60-40-2
CMF C11 H21 N



RN 760176-40-7 HCAPLUS
CN 6H-Purine-6-thione, 1,7-dihydro-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

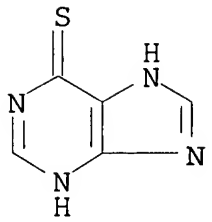
CM 1

CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 50-44-2
CMF C5 H4 N4 S



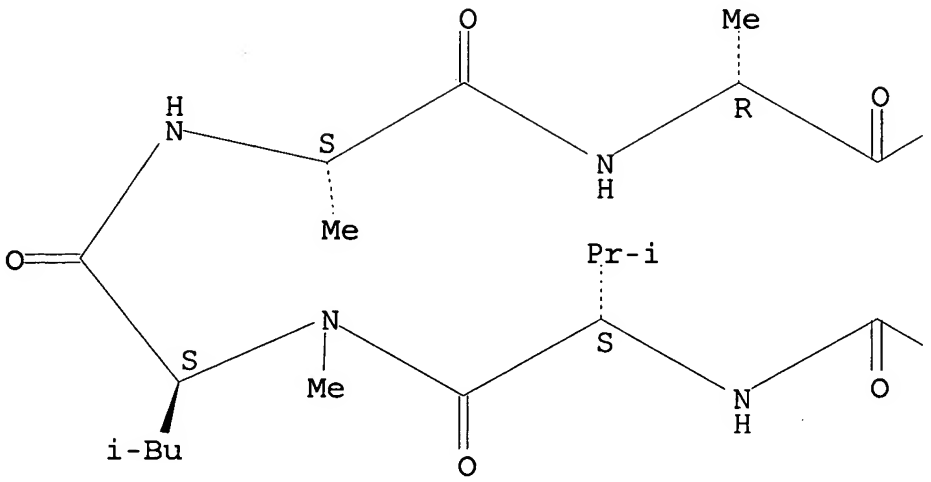
RN 760176-41-8 HCAPLUS
CN Cyclosporin A, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

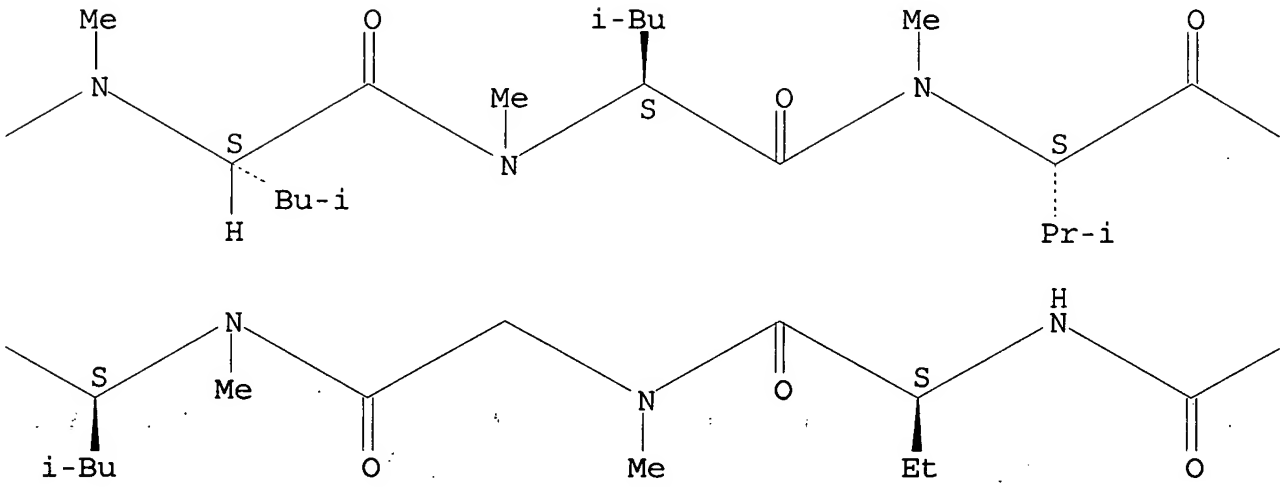
CRN 59865-13-3
CMF C62 H111 N11 O12

Absolute stereochemistry.
Double bond geometry as shown.

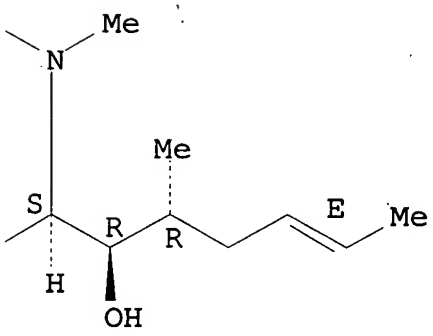
PAGE 1-A



PAGE 1-B

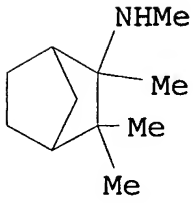


PAGE 1-C



CM 2

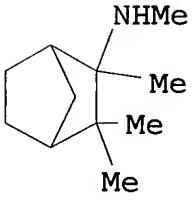
CRN 60-40-2
CMF C11 H21 N



RN 760176-42-9 HCAPLUS
CN L-Glutamic acid, N-[4-[[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

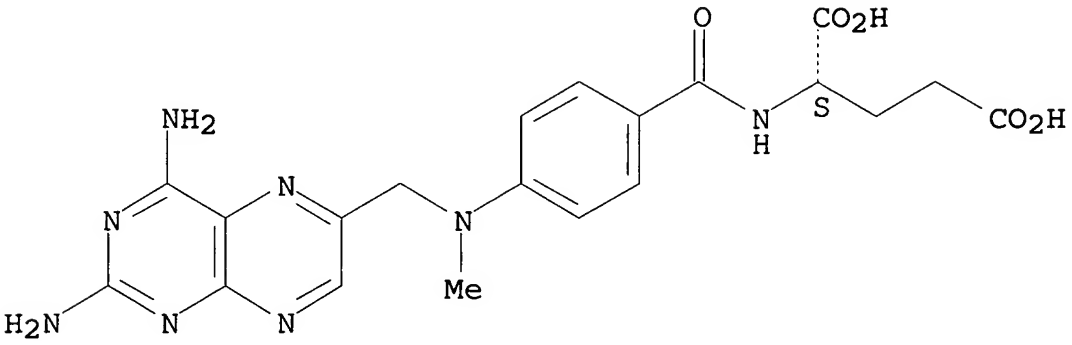
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 59-05-2
CMF C20 H22 N8 O5

Absolute stereochemistry.



RN 760176-43-0 HCAPLUS
CN Immunoglobulin G, anti-(human tumor necrosis factor), disulfide with human-mouse monoclonal cA2 light chain, dimer, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

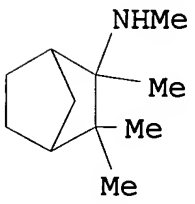
CM 1

CRN 170277-31-3
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 60-40-2
CMF C11 H21 N



RN 760176-44-1 HCAPLUS
CN Heparin, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

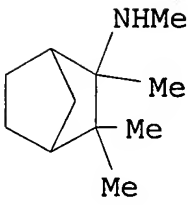
CM 1

CRN 9005-49-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

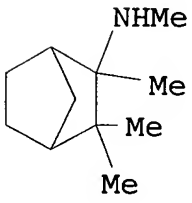
CRN 60-40-2
CMF C11 H21 N



RN 760176-45-2 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, mixt. with 3-[(2S)-1-methyl-2-pyrrolidinyl]pyridine (9CI) (CA INDEX NAME)

CM 1

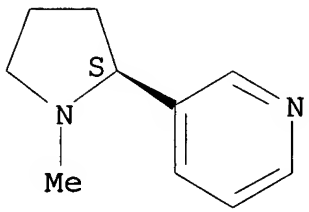
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 54-11-5
CMF C10 H14 N2

Absolute stereochemistry. Rotation (-).



IC ICM A61K031-135
ICS A61P001-12
CC 1-9 (Pharmacology)
Section cross-reference(s): 63
ST tetramethylbicycloheptanamine **gastrointestinal** motility

intestinal condition

IT Inflammation
(Crohn's disease, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease
(Crohn's, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Antihistamines
(H2; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Gastrointestinal** motility
(agents altering; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(buccal; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Inflammation
Intestine, disease
(**colitis**, **spastic**, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease
(**colon**, neurogenic **colon**, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(delayed release; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Biological transport
(digestive tract fluid transport, agents altering; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Gastrointestinal** motility
(disorder, dysmotility; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating

intestinal conditions, and combinations with other agents)

IT Inflammation
Intestine, disease
(**diverticulitis, gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Inflammation
Intestine, disease
(**enterocolitis**, acute, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(extended-release; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Fats and Glyceridic oils, biological studies
(fish; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Digestive tract
(fluid transport, agents altering; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Bladder
(function; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease
(functional **bowel** disorder, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Nervous system agents
(ganglionic blocking agents; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(immediate-release; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease

(inflammatory, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease
(irritable **bowel** syndrome, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**
(large, infection, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Dysentery**
(mild, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(modified-release; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(multiparticulate; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(nasal; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease
(neurogenic, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(oral; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Transport proteins
(proton pump, inhibitors; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Stomach
(pylorus, **pyloric** spasm, **gastrointestinal**

motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease
(small, infection, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Muscle, disease
(spasm, **abdominal**, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Muscle relaxants
(spasmolytics; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Digestive tract, **disease**
(**splenic flexure syndrome**, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(sublingual; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(tablets, modified-release; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT 5-HT agonists
5-HT antagonists
Antacids
Anti-infective agents
Anti-inflammatory agents
Antidiarrheals
Blood pressure
Calcium channel blockers
Combination chemotherapy
Diarrhea
Diuretics
Drug delivery systems
Drug toxicity
Gastrointestinal agents
Heart rate

Human
Immunomodulators
Muscarinic antagonists
Nicotinic antagonists
Vision
(tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Corticosteroids, biological studies
Estrogens
Mineralocorticoids
Opioids
Steroids, biological studies
(tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(transdermal; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Inflammation
Intestine, disease
(**ulcerative colitis, gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Adrenoceptor antagonists
(.beta.-; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT 60-40-2
(tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT 50-02-2, Dexamethasone 50-23-7, Cortisol 50-24-8, Prednisolone 50-44-2, 6-Mercaptopurine 51-34-3, Scopolamine 51-55-8, Atropine, biological studies 52-53-9, Verapamil 53-03-2, Prednisone 53-06-5, Cortisone 54-11-5, Nicotine 54-31-9, Furosemide 57-27-2, Morphine, biological studies 57-94-3, Tubocurarine 59-05-2, Methotrexate 60-26-4, Hexamethonium 69-27-2 76-41-5, Oxymorphone 76-57-3, Codeine 89-57-6, 5-Aminosalicylic acid 101-31-5, Hyoscyamine 124-90-3, Oxycontin 125-28-0, Dihydrocodeine 156-74-1, Decamethonium 306-40-1, Succinylcholine 378-44-9, Betamethasone 437-38-7, Fentanyl 443-48-1, Metronidazole 446-86-6, Azathioprine 596-51-0, Glycopyrrolate 599-79-1, Sulfasalazine 768-94-5, Amantadine 2609-46-3, Amiloride 7187-66-8, Trimethaphan 7290-03-1,

Erysodine 7440-69-9, Bismuth, biological studies 9005-49-6, Heparin, biological studies 15500-66-0, Pancuronium 23255-54-1 28782-42-5, Difenoxine 50700-72-6, Vecuronium 53179-11-6, Loperamide 55985-32-5, Perpidine 59865-13-3, Cyclosporine 64228-79-1, Atracurium 79517-01-4, Sandostatin 85721-33-1, Ciprofloxacin 90566-53-3, Fluticasone 107538-05-6 107538-06-7 122852-69-1, Alosetron hydrochloride 133814-18-3, Doxacurium 133814-19-4, Mivacurium 143558-00-3, Rocuronium 170277-31-3, Remicade **760175-93-7 760175-94-8 760175-95-9 760175-96-0 760175-97-1 760175-98-2 760175-99-3 760176-00-9 760176-01-0 760176-02-1 760176-03-2 760176-04-3 760176-05-4 760176-06-5 760176-07-6 760176-08-7 760176-09-8 760176-10-1 760176-11-2 760176-12-3 760176-13-4 760176-14-5 760176-15-6 760176-16-7 760176-17-8 760176-18-9 760176-19-0 760176-20-3 760176-21-4 760176-22-5 760176-23-6 760176-24-7 760176-25-8 760176-27-0 760176-28-1 760176-29-2 760176-30-5 760176-31-6 760176-32-7 760176-33-8 760176-34-9 760176-35-0 760176-36-1 760176-37-2 760176-38-3 760176-39-4 760176-40-7 760176-41-8 760176-42-9 760176-43-0 760176-44-1 760176-45-2**
(tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:107915 HCAPLUS
DOCUMENT NUMBER: 136:156476
TITLE: Exo-S-mecamylamine formulation for therapeutic uses
INVENTOR(S): Shytle, Douglas; Sanberg, Paul; Newman, Mary; Silver, Archie A.
PATENT ASSIGNEE(S): University of South Florida, USA
SOURCE: U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of Appl. No. PCT/US99/30153.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002016371	A1	20020207	US 2001-882935	20010615
US 6734215	B2	20040511		
WO 2000035279	A1	20000622	WO 1999-US30153	19991216
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1634498	A2	20060315	EP 2005-24899	19991216
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
US 2004044083	A1	20040304	US 2003-441947	20030923
PRIORITY APPLN. INFO.:			US 1998-112534P	P 19981216
			WO 1999-US30153	A2 19991216
			EP 1999-967401	A3 19991216
			US 2001-882935	A1 20010615

AB A pharmaceutical compn., suitable for administration by i.v., transdermal, intrathecal, oral, i.m., and bolus injection route, comprises substantially pure exo-S-mecamylamine or its salt, with <5% of exo-R-mecamylamine. The amt. of exo-S-mecamylamine in the compn. is about 0.5-1000 mg. The compn. is useful for the treatment

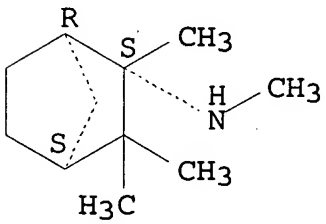
of medical conditions that include but are not limited to substance addiction (involving nicotine, cocaine, alc., amphetamine, opiate, or other psychostimulants), aiding smoking cessation, treating wt. gain assocd. with smoking cessation, hypertension, tremors, cancer, atherogenic profile, neuropsychiatric disorders, chronic fatigue syndrome, Crohn's disease, autonomic dysreflexia, and spasmogenic **intestinal** disorders. For example, mecamylamine and its stereoisomers potently block nicotine-induced seizures in rats, with exo-S-mecamylamine displaying an overall higher therapeutic index over exo-R-mecamylamine.

IT **107596-30-5**
(compns. contg. exo-S-mecamylamine for treatment of drug dependence and other disorders)

RN 107596-30-5 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride, (1R,2S,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



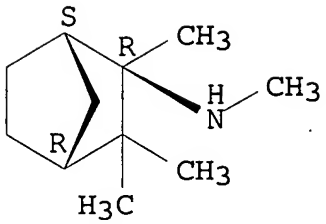
● HCl

IT **107596-31-6P**
(compns. contg. exo-S-mecamylamine free of exo-R-mecamylamine)

RN 107596-31-6 HCAPLUS

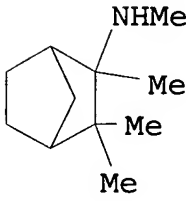
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride, (1S,2R,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

IT **826-39-1**, Mecamylamine hydrochloride
(pharmacol. activity of mecamylamine and its isomers)
RN 826-39-1 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

IC ICM A61K031-13
ICS C07C211-34
INCL 514661000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
IT **Intestine**, disease
(Crohn's; compns. contg. exo-S-mecamylamine for treatment of drug dependence and other disorders)
IT **Intestine**, disease
(spasmogenic disorder; compns. contg. exo-S-mecamylamine for treatment of drug dependence and other disorders)
IT 107538-05-6 **107596-30-5**
(compns. contg. exo-S-mecamylamine for treatment of drug dependence and other disorders)
IT 107538-06-7P **107596-31-6P**

(compns. contg. exo-S-mecamylamine free of exo-R-mecamylamine)
IT 60-40-2, Mecamylamine **826-39-1**, Mecamylamine hydrochloride
(pharmacol. activity of mecamylamine and its isomers)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 5 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:107914 HCAPLUS
DOCUMENT NUMBER: 136:156475
TITLE: Exo-R-mecamylamine formulations for therapeutic uses
INVENTOR(S): Shytle, Douglas; Sanberg, Paul; Newman, Mary; Silver, Archie A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of Appl. No. PCT/US99/30137.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002016370	A1	20020207	US 2001-882934	200106 15
WO 2000035280	A1	20000622	WO 1999-US30137	199912 16
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1634498	A2	20060315	EP 2005-24899	199912 16
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				

PRIORITY APPLN. INFO.: US 1998-112534P P 199812 16

WO 1999-US30137 A2
199912
16

EP 1999-967401 A3
199912
16

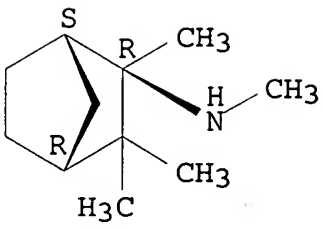
AB A pharmaceutical compn., suitable for administration by i.v., transdermal, intrathecal, oral, i.m., and bolus injection route, comprises substantially pure exo-R-mecamylamine or its salt, with <5% of exo-S-mecamylamine. The amt. of exo-R-mecamylamine in the compn. is about 0.5-1000 mg. The compn. is useful for the treatment of medical conditions that include but are not limited to substance addiction (involving nicotine, cocaine, alc., amphetamine, opiate, or other psychostimulants), aiding smoking cessation, treating wt. gain assocd. with smoking cessation, hypertension, tremors, cancer, atherogenic profile, neuropsychiatric disorders, chronic fatigue syndrome, Crohn's disease, autonomic dysreflexia, and spasmogenic **intestinal** disorders. For example, pretreatment with mecamylamine and its stereoisomers of rats exposed to nicotine dose-dependently prevented the development of the sensitized locomotor responses to nicotine. Chronic exposure to mecamylamine actually reduced the locomotor response to nicotine to levels below that seen in the saline (control) group. Although both isomers of mecamylamine followed the same general pattern, exo-R-mecamylamine was generally more effective at lower doses, for center distance and vertical activity.

IT **107596-31-6**
(compns. contg. exo-R-mecamylamine for treatment of drug dependence and other disorders)

RN 107596-31-6 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride, (1S,2R,4R)- (9CI) (CA INDEX NAME)

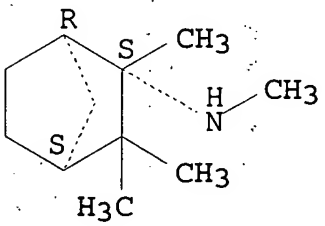
Absolute stereochemistry.



● HCl

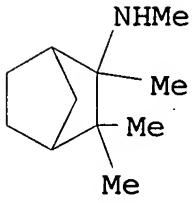
IT **107596-30-5P**
(compns. contg. exo-R-mecamylamine free of exo-S-mecamylamine)
RN 107596-30-5 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride, (1R,2S,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

IT **826-39-1**, Mecamylamine hydrochloride
(pharmacol. activity of mecamylamine and its isomers)
RN 826-39-1 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

IC ICM A61K031-13
ICS C07C211-34
INCL 514661000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
IT **Intestine**, disease
(Crohn's; compns. contg. exo-R-mecamylamine for treatment of drug dependence and other disorders)
IT **Intestine**, disease
(spasmogenic disorder; compns. contg. exo-R-mecamylamine for treatment of drug dependence and other disorders)
IT 107538-06-7 **107596-31-6**
(compns. contg. exo-R-mecamylamine for treatment of drug dependence and other disorders)
IT 107538-05-6P **107596-30-5P**
(compns. contg. exo-R-mecamylamine free of exo-S-mecamylamine)
IT 60-40-2, Mecamylamine **826-39-1**, Mecamylamine hydrochloride
(pharmacol. activity of mecamylamine and its isomers)

L18 ANSWER 6 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:420906 HCAPLUS
DOCUMENT NUMBER: 133:53722
TITLE: Exo-R-mecamylamine formulation and use in treatment
INVENTOR(S): Shytle, Douglas; Sanberg, Paul; Newman, Mary; Silver, Archie
PATENT ASSIGNEE(S): University of South Florida, USA
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2000035280	A1	20000622	WO 1999-US30137	199912 16
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2393442	AA	20000622	CA 1999-2393442	199912 16
EP 1139744	A1	20011010	EP 1999-967396	199912 16
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002532393	T2	20021002	JP 2000-587609	199912 16
EP 1634498	A2	20060315	EP 2005-24899	199912 16
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
US 2002016370	A1	20020207	US 2001-882934	200106 15
PRIORITY APPLN. INFO.:			US 1998-112534P P	199812 16
			EP 1999-967401 A3	199912 16
			WO 1999-US30137 W	199912 16

AB A pharmaceutical compn. includes a therapeutically effective amt. of exo-R-mecamylamine or a pharmaceutically acceptable salt thereof, substantially free of exo-S-mecamylamine, in combination with a pharmaceutically acceptable carrier. Preferably the amt. is about

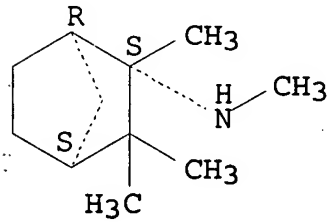
0.5 mg to about 20 mg. Medical conditions are treated by administering a therapeutically effective amt. of exo-R-mecamylamine, or a pharmaceutically acceptable salt thereof, substantially free of its exo-S-mecamylamine, said amt. being sufficient to ameliorate the medical condition. The medical conditions include but are not limited to substance addiction (involving nicotine, cocaine, alc., amphetamine, opiate, other psychostimulant and a combination thereof), aiding smoking cessation, treating wt. gain assocd. with smoking cessation, hypertension, hypertensive crisis, Tourette's Syndrome and other tremors, cancer (such as small cell lung cancer), atherogenic profile, neuropsychiatric disorders (such as bipolar disorder, depression, an anxiety disorder, schizophrenia, a seizure disorders, Parkinson's disease and attention deficit hyperactivity disorder), chronic fatigue syndrome, Crohn's disease, autonomic dysreflexia, and spasmogenic **intestinal** disorders.

IT **107596-30-5**
(exo-R-mecamylamine formulation and therapeutic use)

RN 107596-30-5 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride, (1R,2S,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

IC ICM A01N033-18
ICS A01N033-24

CC 1-12 (Pharmacology)
Section cross-reference(s): 63

ST mecamylamine isomer pharmaceutical therapeutic; drug addiction treatment mecamylamine isomer; wt gain smoking cessation mecamylamine isomer; hypertension Tourette syndrome cancer mecamylamine isomer; cardiovascular neuropsychiatric **gastrointestinal** disease mecamylamine isomer

IT **Intestine**, disease
(Crohn's; exo-R-mecamylamine formulation and therapeutic use)

IT Drugs
(**gastrointestinal**; exo-R-mecamylamine formulation and therapeutic use)
IT **Intestine**, disease
(spasmogenic; exo-R-mecamylamine formulation and therapeutic use)
IT **107596-30-5**
(exo-R-mecamylamine formulation and therapeutic use)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 7 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:420905 HCAPLUS
DOCUMENT NUMBER: 133:53721
TITLE: Exo-S-mecamylamine formulation and use in treatment
INVENTOR(S): Shytle, Douglas; Sanberg, Paul; Newman, Mary; Silver, Archie
PATENT ASSIGNEE(S): University of South Florida, USA
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000035279	A1	20000622	WO 1999-US30153	19991216
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2393437	AA	20000622	CA 1999-2393437	19991216
EP 1139743	A1	20011010	EP 1999-967401	19991216
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

JP 2002532392	T2	20021002	JP 2000-587608	199912 16
EP 1634498	A2	20060315	EP 2005-24899	199912 16
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
US 2002016371	A1	20020207	US 2001-882935	200106 15
US 6734215	B2	20040511		
US 2004044083	A1	20040304	US 2003-441947	200309 23
PRIORITY APPLN. INFO.:			US 1998-112534P P	199812 16
			EP 1999-967401 A3	199912 16
			WO 1999-US30153 W	199912 16
			US 2001-882935 A1	200106 15

AB A pharmaceutical compn. includes a therapeutically effective amt. of exo-S-mecamylamine or a pharmaceutically acceptable salt thereof, substantially free of exo-R-mecamylamine, in combination with a pharmaceutically acceptable carrier. Preferably the amt. is about 0.5 mg to about 20 mg. Medical conditions are treated by administering a therapeutically effective amt. of exo-S-mecamylamine, or a pharmaceutically acceptable salt thereof, substantially free of exo-R-mecamylamine, the amt. being sufficient to ameliorate the medical condition. The medical conditions include but are not limited to substance addiction (involving nicotine, cocaine, alc., amphetamine, opiate, other psychostimulant and a combination thereof), aiding smoking cessation, treating wt. gain assocd. with smoking cessation, hypertension, hypertensive crisis, Tourette's Syndrome and other tremors, cancer (such as small cell lung cancer), atherogenic profile, neuropsychiatric disorders (such as bipolar disorder, depression, an anxiety disorder, schizophrenia, a seizure disorder, Parkinson's disease and attention deficit

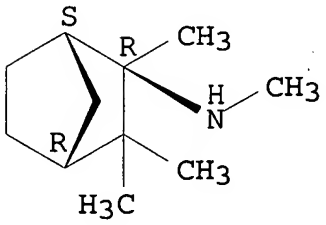
hyperactivity disorder), chronic fatigue syndrome, Crohn's disease, autonomic dysreflexia, and spasmogenic **intestinal** disorders.

IT **107596-31-6**
(exo-S-mecamylamine formulation and therapeutic use)

RN 107596-31-6 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride, (1S,2R,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

IC ICM A01N033-02

CC 1-12 (Pharmacology)
Section cross-reference(s): 63

ST mecamylamine isomer pharmaceutical therapeutic; drug addiction treatment mecamylamine isomer; wt gain smoking cessation mecamylamine isomer; hypertension Tourette syndrome cancer mecamylamine isomer; cardiovascular neuropsychiatric **gastrointestinal** disease mecamylamine isomer

IT **Intestine**, disease
(Crohn's; exo-S-mecamylamine formulation and therapeutic use)

IT Drugs
(**gastrointestinal**; exo-S-mecamylamine formulation and therapeutic use)

IT **Intestine**, disease
(spasmogenic; exo-S-mecamylamine formulation and therapeutic use)

IT **107596-31-6**
(exo-S-mecamylamine formulation and therapeutic use)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

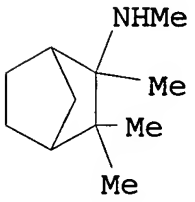
L18 ANSWER 8 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1981:404646 HCAPLUS
DOCUMENT NUMBER: 95:4646

TITLE: Characterization of hypervasopressinemia during surgery
AUTHOR(S): Ukai, Mitsuo; Okumura, Kenji
CORPORATE SOURCE: Sch. Med., Nagoya Univ., Nagoya, 466, Japan
SOURCE: Antidiuretic Horm., [Jt. Semin. Vasopressin] (1980), Meeting Date 1979, 257-70. Editor(s): Yoshida, Sho; Share, Leonard; Yagi, Kinji. Japan Sci. Soc. Press: Tokyo, Japan. CODEN: 45SNAE
DOCUMENT TYPE: Conference
LANGUAGE: English

AB In the mechanisms of the control of arginine vasopressin (AVP) secretion in man, the arterial baroreceptor system and the nociceptive spinal afferent system are the 2 major channels responsible for hypervasopressinemia during surgery. The former is a closed-loop system, modulating plasma AVP levels to a max. of 2400 pg/mL, while the latter is an open-loop system, modulating them to a max. of 350 pg/mL. In dogs, the importance of the spinal afferent system in mediating painful surgical stimulation for AVP release was established with 3 lines of evidence. In rats, **gastrointestinal** traction enhanced AVP release. Morphine (10 mg/kg) inhibited traction-induced AVP release. It inhibited osmotically induced AVP release completely, and hemorrhage-induced AVP release partially. Naloxone (2 mg/kg) reversed the inhibition by morphine of traction-induced AVP release. In patients undergoing open-heart surgery, plasma AVP levels during cardiopulmonary by pass were compared between a morphine-treated group and a control group. Morphine (1-3 mg/kg) suppressed both the mean and the max. plasma AVP levels.

IT **826-39-1**
(vasopressin release in surgery response to)

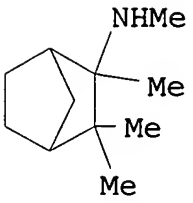
RN 826-39-1 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

CC 14-2 (Mammalian Pathological Biochemistry)
Section cross-reference(s): 1
IT 52-26-6 64-17-5, biological studies **826-39-1**
(vasopressin release in surgery response to)

L18 ANSWER 9 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1981:58134 HCAPLUS
DOCUMENT NUMBER: 94:58134
TITLE: The selective antimuscarinic action of stercuronium
AUTHOR(S): Li, C. K.; Mitchelson, F.
CORPORATE SOURCE: Dep. Pharmacol., Victorian Coll. Pharm., Parkville, 3052, Australia
SOURCE: British Journal of Pharmacology (1980), 70(2), 313-21
CODEN: BJPCBM; ISSN: 0007-1188
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Stercuronium iodide (I) [30033-10-4] dose-dependently inhibited the bradycardia and, to a lesser degree, the vasodepressor response produced by carbachol [51-83-2] in guinea pig. The difference in dose-ratios was 2- and 5.8-fold at 0.2 and 0.4 .mu.mol I/kg, i.v., resp. The affinity of I for muscarinic sites was tissue dependent, the activity in bladder and ileum being 16- to 17-fold less than that in atrium. Affinities for receptors in rabbit left atrium and ear artery were similar, but 2.3-fold less than for receptors in guinea pig atria. Similar results were obsd. with gallamine triethiodide [65-29-2] in rabbit ear artery. Gallamine and I have, therefore, a greater affinity for cardiac receptors and synaptosomal inhibitory muscarinic receptors than for muscarinic receptors mediating contraction of bladder and ileum.
IT **826-39-1**
(muscle response to, stercuronium effects on)
RN 826-39-1 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

CC 1-5 (Pharmacodynamics)
IT **Intestine**
(ileum, muscarinic receptors of, stercuronium effects on)
IT 60-31-1 **826-39-1**
(muscle response to, stercuronium effects on)

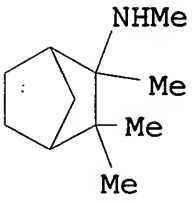
L18 ANSWER 10 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1979:15947 HCAPLUS
DOCUMENT NUMBER: 90:15947
TITLE: The evaluation of cardiovascular drugs in the anesthetized, unrestrained rat
AUTHOR(S): Purdy, Ralph E.; Ashbrook, Donald W.
CORPORATE SOURCE: Dep. Med. Pharmacol. Ther., Univ. California, Irvine, CA, USA
SOURCE: Journal of Pharmacy and Pharmacology (1978), 30(7), 436-41
CODEN: JPPMAB; ISSN: 0022-3573
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A method is reported which allows continuous long-term drug administration and simultaneous blood pressure measurement in the unanesthetized unrestrained rat. The external jugular vein and **abdominal** aorta were cannulated and the opposite ends of the cannulae were passed s.c. and exteriorized at the back of the head. They were then passed through a spring attached at the lower end to the skull and, at the upper end, to a counterweighted cantilever. In rats so prepared, infusion of angiotensin amide [53-73-6] (200 ng/kg/min) increased blood pressure for the 48-h infusion period and decreased heart rate for the first 6 h. Angiotensin amide (30 ng/kg/min for 7 days) had no effect on blood pressure or heart rate, and neither dose of angiotensin altered cardiac turnover. Hydralazine-HCl [304-20-1], mecamylamine-HCl [**826-39-1**], and clonidine-HCl [4205-91-8] reduced blood pressure to 63, 62, and 84% of the control value resp., and clonidine induced a transient increase before its depressor effect. Clonidine also decreased

heart rate by 26%, whereas hydralazine increased it by 38%. The magnitude of pressor response to (-)-noradrenaline bitartrate [51-40-1], tyramine-HCl [60-19-5], and angiotensin was reduced by hydralazine and increased by mecamylamine; and clonidine increased the response to angiotensin, but not to that of the other 2 agents.

IT **826-39-1**
(blood pressure and heart rate response to, detn. of)

RN 826-39-1 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

CC 1-1 (Pharmacodynamics)

IT 53-73-6 304-20-1 **826-39-1** 4205-91-8
(blood pressure and heart rate response to, detn. of)

L18 ANSWER 11 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1978:15823 HCAPLUS

DOCUMENT NUMBER: 88:15823

TITLE: Comparative studies on anti-nicotinic action of hexamethonium, mecamylamine and adenosine in the guinea pig isolated ileum

AUTHOR(S): Hayashi, Eiichi; Yamada, Shizuo; Mori, Motokuni

CORPORATE SOURCE: Dep. Pharmacol., Shizuoka Coll. Pharm. Sci., Shizuoka, Japan

SOURCE: Japanese Journal of Pharmacology (1977), 27(5), 659-65
CODEN: JJPAAZ; ISSN: 0021-5198

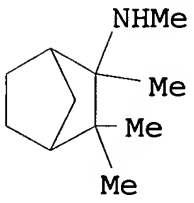
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The mechanism of the antinicotinic actions of hexamethonium chloride [60-25-3], mecamylamine-HCl [**826-39-1**] and adenosine [58-61-7] was investigated in guinea pig isolated ileum. Mecamylamine shifted the dose-response curves for nicotine tartrate [3275-73-8] to the right with a gradual depression. Hexamethonium shifted the curves to the right without a depression and adenosine

made only a gradual depression, suggesting different modes of antinicotinic action. The transmurally-stimulated twitch response was unaffected, partially inhibited, and abolished by hexamethonium, mecamylamine, and adenosine, resp. These compds. also had little effect on the direct muscle response to acetylcholine and on acetylcholinesterase activity of the ileum. It is suggested that the antagonism to the effect of nicotine shown by mecamylamine is not a simple competitive blockade of ganglionic receptors as is the case with hexamethonium and that adenosine may antagonize the effect of nicotine noncompetitively.

IT **826-39-1**
(**intestine** response to nicotine inhibition by)
RN 826-39-1 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

CC 1-4 (Pharmacodynamics)
ST nicotine antagonist **intestine**
IT **Intestine**
(ileum, nicotine and antagonist effect on)
IT 58-61-7, biological studies 60-25-3 **826-39-1**
(**intestine** response to nicotine inhibition by)
IT 3275-73-8
(**intestine** response to, antagonist effect on)

L18 ANSWER 12 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1976:472026 HCAPLUS
DOCUMENT NUMBER: 85:72026
TITLE: Drug absorption from small **intestine** of the triparanol-treated rat in situ
AUTHOR(S): Venho, V. M. K.
CORPORATE SOURCE: Dep. Pharmacol., Univ. Helsinki, Helsinki, Finland
SOURCE: Acta Pharmacologica et Toxicologica (1976), 39(3), 321-30

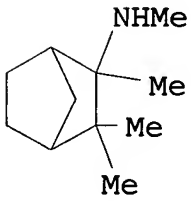
CODEN: APTOA6; ISSN: 0001-6683
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effect of triparanol [78-41-1] (25 mg/kg/day, by gavage, for 3 weeks) on the absorption of phenobarbitone Na [57-30-7], sulfafurazole [127-69-5], isoniazid [54-85-3], mecamylamine [826-39-1] and quinidine sulfate [50-54-4] from the rat small **intestine** was studied in situ by measuring disappearance from the **intestinal** lumen. The appearance of sulfafurazole and mecamylamine in the **intestinal** lumen was also studied after i.v. administration, and the partitioning of mecamylamine between the buffer soln. and the **intestinal** tissue was measured in vitro. Triparanol retarded the absorption of sulfafurazole, whereas the absorption of mecamylamine was accelerated. The amt. of sulfafurazole and mecamylamine in the **intestinal** lumen after i.v. administration was relatively slight. The in vitro partitioning of mecamylamine into the **intestinal** tissue was higher in triparanol-treated than in control **intestines.** Tripranol did not change the absorption of phenobarbitone, isoniazid or quinidine. Phenobarbitone in the whole blood at the end of the expt. was increased after triparanol, but the levels of other drugs were unchanged. Triparanol did not modify drug concns. in the **intestinal** wall at the end of the expt. The relatively slight changes in drug absorption induced by triparanol are probably due to changes in the morphol. and compn. of the **intestinal** wall.

IT **826-39-1**
(absorption of, by **intestine**, triparanol effect on)

RN 826-39-1 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



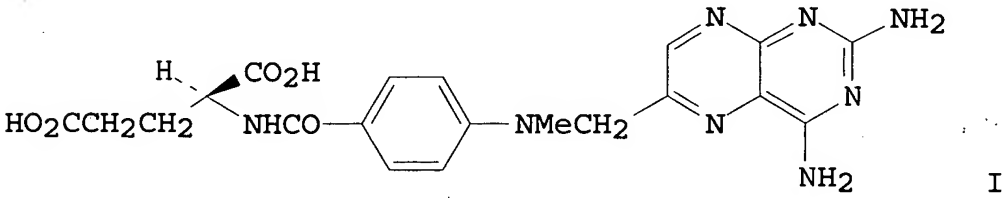
● HCl

CC 1-2 (Pharmacodynamics)

ST triparanol **intestine** drug absorption

IT **Intestine**, metabolism
(pharmaceuticals absorption by, triparanol effect on)
IT 50-54-4 54-85-3 57-30-7 127-69-5 **826-39-1**
(absorption of, by **intestine**, triparanol effect on)
IT 78-41-1
(pharmaceuticals absorption by **intestine** response to)

L18 ANSWER 13 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1976:173752 HCAPLUS
DOCUMENT NUMBER: 84:173752
TITLE: Effect of methotrexate on drug absorption from the rat small **intestine** in situ and in vitro
AUTHOR(S): Venho, V. M. K.
CORPORATE SOURCE: Dep. Pharmacol., Univ. Helsinki, Helsinki, Finland
SOURCE: Acta Pharmacologica et Toxicologica (1976), 38(5), 450-64
CODEN: APTOA6; ISSN: 0001-6683
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

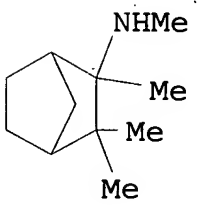
AB The effect of methotrexate Na (I Na) [15475-56-6] (20 mg/kg, i.m.) on the absorption of phenobarbitone Na [57-30-7] sulfafurazole [127-69-5], mecamylamine-HCl [**826-39-1**], quinidine sulfate [50-54-4] and isoniazid [54-85-3] from the rat small **intestine** was studied in situ and in vitro. The disappearance of all drugs studied from the **intestinal** fluid in situ was retarded on the 3rd day after I administration. The fluid transfer and the amt. of drugs passed through the **intestinal** wall in vitro were also decreased. The absorption of phenobarbitone was reversible within 6 days, whereas the absorption of quinidine was still retarded on the 6th day after I administration. I did not modify the amt. of quinidine excreted into the **intestinal** lumen after i.v. administration. The levels of other drugs except isoniazid in the blood at the end of the expt. showed changes corresponding to their disappearance from

the intestial lumen. In situ the drug levels in the **intestinal** wall were much lower than in vitro. INT: their levels in the **intestinal** wall reflected drug absorption in vitro but not in situ. The I-induced reversible decrease in absorption seems to be attributable at least partly to diminished water flux through the **intestinal** wall, although other mechanisms may also exist.

IT **826-39-1**
(absorption of, by **intestine**, methotrexate effect on)

RN 826-39-1 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

CC 1-5 (Pharmacodynamics)

ST methotrexate drug absorption **intestine**

IT Pharmaceuticals
(metab. of, by **intestine**, methotrexate effect on)

IT **Intestine**, metabolism
(pharmaceutical absorption by, methotrexate effect on)

IT 50-54-4 54-85-3 57-30-7 127-69-5 **826-39-1**
(absorption of, by **intestine**, methotrexate effect on)

IT 15475-56-6
(pharmaceutical absorption by **intestine** response to)

L18 ANSWER 14 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1975:437637 HCAPLUS

DOCUMENT NUMBER: 83:37637

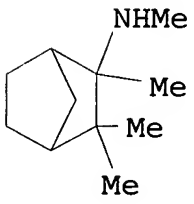
TITLE: Absorption of morphine, butylscopolamine, mecamylamine, and phenobarbitone from the small **intestine** of the triparanol-treated rat in situ

AUTHOR(S): Venho, V. M. K.

CORPORATE SOURCE: Dep. Pharmacol., Univ. Helsinki, Helsinki, Finland

SOURCE: Arzneimittel-Forschung (1975), 25(2), 232-4

CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Pretreatment of rats with triparanol [78-41-1] (25-50 mg/kg/day for 3 weeks) increased the absorption of morphine-HCl (I-HCl) [52-26-6] and mecamylamine-HCl [**826-39-1**] and decreased the absorption of butylscopolamine-HBr [149-64-4] by the small **intestine** in vivo. Triparanol had no effect on absorption of phenobarbitone Na [57-30-7]. Triparanol decreased the cholesterol [57-88-5] content of the **intestinal** wall. These results partially confirmed and partially contradicted previously detd. in vitro results.
IT **826-39-1**
(absorption of, by **intestine**, triparanol effect on)
RN 826-39-1 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)

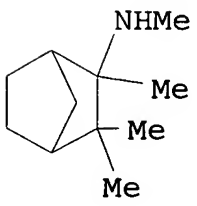


● HCl

CC 1-5 (Pharmacodynamics)
ST triparanol **intestine** drug; morphine **intestine** triparanol; mecamylamine **intestine** triparanol; butylscopolamine **intestine** triparanol; phenobarbitone **intestine** triparanol
IT **Intestine**, metabolism
(pharmaceuticals absorption by, triparanol effect on)
IT 52-26-6 57-30-7 149-64-4 **826-39-1**
(absorption of, by **intestine**, triparanol effect on)
IT 57-88-5, biological studies
(of **intestine**, triparanol effect on)
IT 78-41-1
(pharmaceuticals absorption by **intestine** response to)

L18 ANSWER 15 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1975:437548 HCAPLUS

DOCUMENT NUMBER: 83:37548
TITLE: Cholinergic agents affect two receptors that modulate transmitter release at a central synapse in Aplysia californica
AUTHOR(S): Woodson, Paul B. J.; Schlapfer, Werner T.; Tremblay, Jacques P.; Barondes, Samuel H.
CORPORATE SOURCE: Sch. Med., Univ. California, La Jolla, CA, USA
SOURCE: Brain Research (1975), 88(3), 455-74
CODEN: BRREAP; ISSN: 0006-8993
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB When 34 cholinergic drugs were tested for their effect on excitatory postsynaptic potentials (EPSP) following presynaptic stimulation of cell R15 of the **abdominal** ganglion from Aplysia californica, 14 of them, including scopolamine-HCl (I-HCl) [55-16-3] (5 .times. 10-4M), had no effect. Acetylcholine chloride [60-31-1] and 3 others depressed the 1st EPSP of a train more than the last, whereas 8 drugs, including trimethidinium methosulfate [14149-43-0], depressed the last more than the 1st, and 8 drugs such as D-tubocurarine chloride [57-94-3] depressed all EPSP to the same extent. A mechanism involving 2 receptors at this synapse is discussed.
IT **826-39-1**
(nerve center transmission response to, in Aplysia californica)
RN 826-39-1 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)

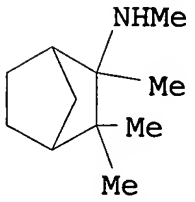


● HCl

CC 1-4 (Pharmacodynamics)
Section cross-reference(s): 12
IT 51-83-2 52-88-0 54-71-7 54-77-3 55-16-3 55-48-1 55-97-0 56-34-8 57-94-3 60-31-1 60-41-3 61-94-9 64-20-0 65-29-2 65-30-5 67-48-1 69-27-2 71-27-2 134-63-4 155-41-9 541-22-0 590-63-6 637-49-0 **826-39-1** 999-81-5

2303-35-7 6899-10-1 13146-86-6 14149-43-0 15053-09-5
17360-35-9 32794-55-1 55789-51-0
(nerve center transmission response to, in Aplysia californica)

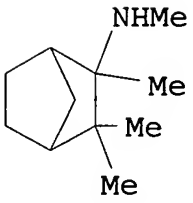
L18 ANSWER 16 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1973:105 HCAPLUS
DOCUMENT NUMBER: 78:105
TITLE: Effect of mecamylamine and pempidine on postganglionic sympathetic nerves
AUTHOR(S): Clarke, D. E.; Capps, P. A. G.
CORPORATE SOURCE: Sch. Stud. Pharmacol., Univ. Bradford, Bradford, UK
SOURCE: Archives Internationales de Pharmacodynamie et de Therapie (1972), 199(2), 282-8
CODEN: AIPTAK; ISSN: 0003-9780
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Pempidine tartrate (I tartrate) [546-48-5] (80-1280 .mu.g/ml) and mecamylamine-HCl [**826-39-1**] (200-400 .mu.g/ml) antagonized the inhibitor response to periarterial nerve stimulation in the Finkleman prepn. of the rabbit ileum. This antagonism, unlike that seen with bretylium tosylate [61-75-6] (10-20 .mu.g/ml), was neither prevented by cocaine-HCl [53-21-4] nor reversed by the addn. of d-amphetamine [51-64-9] but was readily reversed by washing. I and mecamylamine decreased smooth muscle myogenic activity and responsiveness to 1,1-dimethyl-4-phenylpiperazinium iodide [54-77-3] and acetylcholine bromide [66-23-9]. It was concluded that mecamylamine and I do not block the effects of postganglionic sympathetic nerve stimulation by exerting a bretylium-like action.
IT **826-39-1**
(periarterial nerve stimulation blocking by)
RN 826-39-1 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

CC 1-4 (Pharmacodynamics)
ST muscle smooth pempidine mecamylamine; bretylium pharmacol pempidine mecamylamine; **intestine** pempidine mecamylamine; nerve sympathetic pempidine mecamylamine
IT **Intestine**
(contraction of, periarterial nerve stimulation inhibition of, mecamylamine and pempidine effect on)
IT 54-77-3 66-23-9
(**intestine** response to, mecamylamine and pemmpidine effect on)
IT 546-48-5 **826-39-1**
(periarterial nerve stimulation blocking by)

L18 ANSWER 17 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1971:402508 HCAPLUS
DOCUMENT NUMBER: 75:2508
TITLE: Contractive mechanism of serotonin in the isolated rat jejunum, with special reference to its concentration-action curve
AUTHOR(S): Fujimoto, Katsuji; Suzuki, Aritomo; Matsumoto, Hiroshi
CORPORATE SOURCE: Sch. Med., Kobe Univ., Kobe, Japan
SOURCE: Kobe Journal of Medical Sciences (1970), 16(3), 101-18
CODEN: KJMDA6; ISSN: 0023-2513
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of 11 different drugs on the contractions produced by acetylcholine (ACh), serotonin (5-HT), and Ba in the isolated rat jejunum were compared. Eserine enhanced the contraction due to both ACh and 5-HT, but not that of Ba. The remaining drugs either decreased contractions of all 3 agonists or had no effect on Ba contractions. The results suggest that the contraction of 5-HT is due to release of ACh by stimulation of parasympathetic nerve endings and to direct stimulation of a 5-HT receptor in the muscle. Data from concentration-action curves indicated that (a) the inhibition by cocaine, procaine, and morphine of ACh release by 5-HT was due to competition; (b) the inhibition by methysergide of the 5-HT receptor of muscle was also due to competition; (c) the competitive antagonism of the ganglion-blocking agents to 5-HT was the indirect expression of competitive inhibition at the cholinergic receptor of ACh released by 5-HT.
IT **826-39-1**
(**intestine** contraction from serotonin inhibition by)
RN 826-39-1 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

CC 11 (Mammalian Biochemistry)
ST serotonin contraction **intestine**; acetylcholine contraction jejunum; cholinergic contraction jejunum
IT **Intestines**
(contraction of, serotonin effect on)
IT 51-05-8 53-21-4 55-43-6 55-48-1 57-27-2, biological studies 57-64-7 60-25-3 129-49-7 546-48-5 **826-39-1** 969-33-5
(**intestine** contraction from serotonin inhibition by)
IT 50-67-9, biological studies 60-31-1, biological studies 7440-39-3, biological studies
(**intestine** contraction in response to)

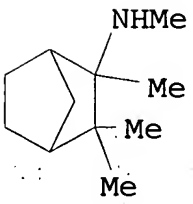
L18 ANSWER 18 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1968:464982 HCAPLUS
DOCUMENT NUMBER: 69:64982
TITLE: Transfer of water and drugs by the isolated **intestine** of the x-irradiated rat
AUTHOR(S): Mattila, M. J.; Takki, S.; Holsti, Lars R.
CORPORATE SOURCE: Dep. Pharmacol., Univ. Helsinki, Helsinki, Finland
SOURCE: Arzneimittel-Forschung (1968), 18(7), 889-90
CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Male rats weighing 250-280 g. were exposed to 700 r. of whole body radiation from 60Co and sacrificed at 2, 4, or 6 days postirradn. The proximal 40 cm. of **intestine** was removed and perfused with Krebs bicarbonate saline followed by either 500 or 750 .mu.g./ml. 2-ethylisonicotinethioamide (I), 250 or 500 .mu.g./ml. acetylsalicylic acid (II), or 250 .mu.g./ml. N,2,3,3-tetramethylnorbornanamine (III). The vol. of Krebs bicarbonate soln. passing through the **intestinal** wall was increased by irradn. Both the passed fluid vol. and concn. of I was increased by irradn. with the max. effect at 4 days postexposure. Absorption of

II was increased without increase in water transfer. In some cases, the transfer of III was impaired by irradn.

IT **826-39-1**
(absorption of, by **intestine** after x-irradiation)

RN 826-39-1 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

CC 5 (Radiation Biochemistry)

ST **intestine** irradn; saline **intestine** irradn; ethylisonicotinethioamide **intestine** irradn; acetylsalicylic acid **intestine** irradn; tetramethylnorbornamine **intestine** irradn; **intestine** irradn drugs

IT X-rays, biological effects
(on **intestine**, drug and water transport in relation to)

IT **Intestines**, metabolism
(pharmaceutical and water transport by, after x-irradiation)

IT 50-78-2, biological studies 536-33-4 **826-39-1**
(absorption of, by **intestine** after x-irradiation)

L18 ANSWER 19 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1967:64130 HCAPLUS

DOCUMENT NUMBER: 66:64130

TITLE: Effects of mecamylamine and pempidine on the motility of small **intestine** in different species of animals

AUTHOR(S): Garg, K. N.

CORPORATE SOURCE: Dep. Pharmacol., Med. Coll., Amritsar, India

SOURCE: Indian Journal of Medical Research (1913-1988) (1966), 54(11), 1057-9
CODEN: IJMRAQ; ISSN: 0019-5340

DOCUMENT TYPE: Journal

LANGUAGE: English

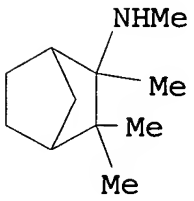
AB The effects of mecamylamine-HCl and pempidine tartrate on the

propulsive motility of the **intestine** in dogs, rabbits, and guinea pigs were studied by a previously described technique (CA 61, 2359a). The drugs were injected i.v. into dogs and rabbits and i.p. into guinea pigs. Mecamylamine-HCl decreased the propulsive motility of the gut by 19-22% in all the animals studied. Pempidine tartrate, however, decreased the propulsive motility of the gut by only 14-17% in all of the animals. In both cases, maximal effects were observed in dogs, with lesser effects in rabbits and guinea pigs.

IT **826-39-1**
(**intestinal** motility response to, species and)

RN 826-39-1 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

CC 15 (Pharmacodynamics)

ST MECAMYLAMINE GUT MOTILITY; **INTESTINE** MOTILITY PEMPIDINE; AMINES **INTESTINE** MOTILITY; GUT MOTILITY MECAMYLAMINE; MOTILITY GUT MECAMYLAMINE; PEMPIDINE **INTESTINE** MOTILITY

IT **Intestines**
(motility of, effect of mecamylamine and pempidine on, species and)

IT 546-48-5 **826-39-1**
(**intestinal** motility response to, species and)

L18 ANSWER 20 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1966:468156 HCAPLUS

DOCUMENT NUMBER: 65:68156

ORIGINAL REFERENCE NO.: 65:12730f-h

TITLE: The site of action of drugs on the isolated taenia ceci from the guinea pig

AUTHOR(S): Akubuc, P. I.

CORPORATE SOURCE: King's Coll., London

SOURCE: British Journal of Pharmacology and Chemotherapy (1966), 27(2), 347-65

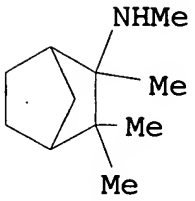
CODEN: BJPCAL; ISSN: 0366-0826
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The mechanisms of the contractions of the taenia from the guinea pig cecum (the taenia ceci) to acetylcholine (I), histamine (II), nicotine (III), and to 5-hydroxytryptamine (IV) were investigated. Hyoscine blocked the responses to I and to III, reduced those to IV hut did not modify those to II. The organophosphorus anticholinesterase drug,mipafox, potentiated the responses to I, III and IV but not those to II. The responses to III were almost abolished by procaine and those to IV were greatly reduced. The effect of II was not modified by procaine but that of I was slightly reduced. Cocaine or morphine antagonized the responses to III or IV but not those to I or II. Hexamethonium blocked the responses to III but left those of other agonists unchanged. Mecamylamine or dimethylphenylpiperazinium blocked the contractions to III, reduced those to IV but not those to I. The contractions to II were reduced by mecamylamine but not by dimethylphenylpiperazinium. The contractions to IV were reduced by hyoscine or lysergic acid diethylamide but were abolished by a combination of the 2 antagonist drugs. High concns. of IV inhibited the responses to IV but did not affect those to I, II, or III. Mepyramine blocked the responses to II but not those of I or IV. I or II activated receptors sited on the smooth muscle cells. III stimulated cholinergic ganglion cells. The action of IV was partly directed on the smooth muscle cells and partly indirect on the cholinergic ganglion cells.

IT **6482-01-5**, 2-Norbornanamine, N,2,3,3-tetramethyl-, hydrobromide
(muscle (smooth) response to 3-(2-aminoethyl)indol-5-ol, nicotine and)

RN 6482-01-5 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrobromide (9CI) (CA INDEX NAME)

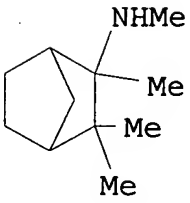


● HBr

CC 68 (Pharmacodynamics)

IT 51-34-3, Scopolamine
(in **intestine** response to acetylcholine, to acetylcholine, 3-(2-aminoethyl)indol-5-ol and nicotine)
IT 50-36-2, Cocaine 57-27-2, Morphine **6482-01-5**, 2-Norbornanamine, N,2,3,3-tetramethyl-, hydrobromide
(muscle (smooth) response to 3-(2-aminoethyl)indol-5-ol, nicotine and)

L18 ANSWER 21 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1966:87359 HCAPLUS
DOCUMENT NUMBER: 64:87359
ORIGINAL REFERENCE NO.: 64:16474c-e
TITLE: Mechanism of the contracting action of angiotensin on the excised small **intestine** of guinea pigs analyzed by the concentration action curve
AUTHOR(S): Suzuki, Arichiomo; Matsumuto, Hiroshi
CORPORATE SOURCE: Univ. Kobe, Japan
SOURCE: Kobe Journal of Medical Sciences (1965), 11(3), 111-30
CODEN: KJMDA6; ISSN: 0023-2513
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of combinations of drugs on the contraction of guinea pig **intestine** were assayed. The degree of longitudinal muscle contraction vs. concn. of drugs was recorded on a smoked drum indicating the intensity of action. One set of drugs including angiotensin (I), acetylcholine (II), nicotine, and in some expts., bradykinin were tested in combinations with each other or with a larger group of drugs (Pendiomid dibromide, mecamylamine-HCl, pempidine bitartrate, pentolinium bitartrate, hexamethonium bromide, Et4NBr, morphine-HCl, cocaine-HCl, procaine-HCl, atropine sulfate, diphenhydramine-HCl, and eserine sulfate). The latter group includes agents that either block the ganglions or inhibit the release of II from nerve endings. The resultant curves permit a classification of the interaction of pairs of drugs in terms of various kinds of antagonism or synergism (CA 53, 19177h). The effect of I on the contraction of longitudinal muscle is mainly due to stimulation of the parasympathetic nerve endings and partly due to direct muscle stimulation.
IT **826-39-1**, 2-Norbornanamine, N,2,3,3-tetramethyl-, hydrochloride
(in **intestine** response to acetylcholine, angiotensin, etc.)
RN 826-39-1 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

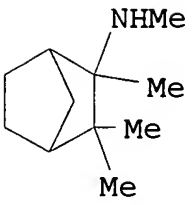
CC 68 (Pharmacodynamics)
IT **Intestines**
(effect of angiotensin, bradykinin, etc., on)
IT 52-62-0, Pyrrolidinium, 1,1'-pentamethylenebis[1-methyl-hydrogen tartrate] 53-21-4, Cocaine, hydrochloride 57-27-2, Morphine 59-46-1, Benzoic acid, p-amino-, 2-(diethylamino)ethyl ester 60-26-4, Ammonium, hexamethylenebis[trimethyl- 66-40-0, Ammonium, tetraethyl 147-24-0, Ethylamine, 2-(diphenylmethoxy)-N,N-dimethyl-, hydrochloride 306-53-6, Ammonium, [(methylimino)diethylene]bis[ethyldimethyl-, bromide 546-48-5, Piperidine, 1,2,2,6,6-pentamethyl-, tartrate (1:1) **826-39-1**, 2-Norbornanamine, N,2,3,3-tetramethyl-, hydrochloride
(in **intestine** response to acetylcholine, angiotensin, etc.)
IT 51-55-8, Atropine
(**intestine** response to, acetylcholine, angiotensin, etc.)
IT 57-47-6, Physostigmine
(**intestine** response to, acetylcholine, angiotensin, etc. in relation to)
IT 51-84-3, Choline, acetyl- 54-11-5, Nicotine
(**intestine** response to, effect of angiotensin, cocaine, etc. on)
IT 58-82-2, Bradykinin
(**intestine** response to, effect of angiotensin, cocaine, etc., on)
IT 53-73-6, Alanine, N-[1-[N-[N-[N-[N-(N2-L-asparaginyl-L-arginyl)-L-valyl]-L-tyrosyl]-L-valyl]-L-histidyl]-L-prolyl]-3-phenyl-, L-
(**intestine** response to, effect of cocaine, morphine, etc., on)

L18 ANSWER 22 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1966:22150 HCAPLUS
DOCUMENT NUMBER: 64:22150
ORIGINAL REFERENCE NO.: 64:4112e-g

TITLE: A direct and an indirect action of 5-hydroxytryptamine on the distal part of the isolated **colon** of the rat
AUTHOR(S): Ulrich, Karen
CORPORATE SOURCE: King's Coll., London
SOURCE: Journal of Pharmacy and Pharmacology (1965), 17(11), 710-20
CODEN: JPPMAB; ISSN: 0022-3573
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The motor response of 5-HT (5-hydroxytryptamine) on the distal part of the isolated rat **colon** was investigated by constructing dose-response curves to 5-HT, acetylcholine (I), and nicotine (II); these were repeated in the presence of different antagonists and an anticholinesterase. Hyoscine abolished the responses to I, almost completely blocked the effect of II, but reduced the contractions to 5-HT to only about half of the original value. Mipafox potentiated the responses to I, 5-HT, or II. Procaine and cocaine inhibited to the same extent the large doses of 5-HT, but had no effect on the small doses. Hexamethonium bromide had no effect on I or 5-HT, but antagonized II. Mecamylamine (III) had no effect on I; it blocked responses to II and reduced those of large doses of 5-HT. The effect of 1,1-dimethyl-4-phenylpiperazinium iodide on the 3 agonists was similar to that of III. 2-Bromolysergic acid diethylamide tartrate had no effect on the response to I, but reduced equally the contractions due to 5-HT and II. 5-HT acted indirectly by stimulating the intramural parasympathetic ganglia and directly by an action on the muscular fibers. The direct action was pronounced with small doses, the indirect action with higher doses of 5-HT.

IT **826-39-1**, 2-Norbornanamine, N,2,3,3-tetramethyl-, hydrochloride
(in **intestine** response to 3-(2-aminoethyl)indol-5-ol and nicotine)
RN 826-39-1 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

CC 68 (Pharmacodynamics)
IT **Intestines**
(3-(2-aminoethyl)indol-5-ol effect on)
IT Lysergamide, 2-bromo-N,N-diethyl-, tartrate (1:1)
(in **intestine** response to 3-(2-aminoethyl)indol-5-ol and nicotine)
IT 114-28-3, Piperazinium, 1,1-dimethyl-4-phenyl-
(compds., in **intestinal** response to 3-(2-aminoethyl)indol-5-ol and nicotine)
IT 59-46-1, Benzoic acid, p-amino-, 2-(diethylamino)ethyl ester
(in **intestine** response to 3-(2-aminoethyl)-indol-5-ol)
IT **826-39-1**, 2-Norbornanamine, N,2,3,3-tetramethyl-, hydrochloride
(in **intestine** response to 3-(2-aminoethyl)indol-5-ol and nicotine)
IT 114-49-8, Scopolamine, hydrobromide
(in **intestine** response to acetylcholine)
IT 53-21-4, Cocaine, hydrochloride
(in **intestine** response to acetylcholine, in **intestine** response to 3-(2-aminoethyl)-indol-5-ol)
IT 60-26-4, Ammonium, hexamethylenebis[trimethyl-
(in **intestine** response to nicotine)
IT 65-31-6, Nicotine, tartrate (1:2)
(**intestinal** response to, effect of hyoscine, mipafox, etc., on)
IT 971-74-4, Indol-5-ol, 3-(2-aminoethyl), compd. with creatinine sulfate (1:1:1)
(**intestine** response to)
IT 51-84-3, Choline, acetyl-
(**intestine** response to, mipafox effect on)

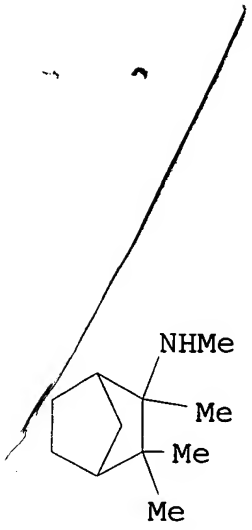
L18 ANSWER 23 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1963:477440 HCAPLUS
DOCUMENT NUMBER: 59:77440
ORIGINAL REFERENCE NO.: 59:14470a-d

TITLE: The site of the 5-hydroxytryptamine receptor on the intramural nervous plexus of the g inea pig isolated ileum
AUTHOR(S): Brownlee, G.; Johnson, E. S.
CORPORATE SOURCE: King's Coll., London
SOURCE: British Journal of Pharmacology and Chemotherapy (1963), 21(2), 306-22
CODEN: BJPCAL; ISSN: 0366-0826
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Dose-response measurements were made on the guinea pig isolated ileum with 6 agonists, acetylcholine, 5-hydroxytryptamine (I), nicotine, dimethylphenylpiperazinium (II), choline Ph ether (III), and histamine. The dose effects were repeated in the presence of each of 12 antagonists and 1 anti-cholinesterase. Acetylcholine and histamine were chosen because of their direct mode of action on smooth muscle; nicotine, II, and III were used as examples of drugs that act at the ganglionic acetylcholine receptor. I was the drug investigated. Hyoscine blocked the contractions caused by acetylcholine, I, and the ganglion stimulants but left the responses to histamine unchanged. The anticholinesterase, N,N'-diisopropylphosphor-odiamidic fluoride (mipafox), potentiated all the agonists except histamine. The strength of potentiation decreased in the order: I, nicotine, II, III, and acetylcholine. The local anesthetic, procaine, inhibited to the same extent contractions elicited by I, nicotine, II, and III. I, like nicotine, II, and III, mediated its response through the nervous plexus. Lysergic acid derivs. produced spasm and prolonged changes in tone; phenoxybenza-mine caused nonspecific blockade. The diverse modes of action of a no. of ganglion-blocking agents were selectively used. Thus, hexamethonium, pentolinium, and nicotine in its competitive phase, blocked contractions due to nicotine, II, and III, and left those due to I, acetylcholine, and histamine unchanged. The depolarizing ganglion-blocking agents, II and nicotine, inhibited the responses to all the indirectly acting drugs. Furthermore, mecamylamine, a drug with a less well-defined mode of action, partially inhibited contractions due to I in a concn. that blocked those due to nicotine, II, and III. Pempidine, known to act like mecamylamine, did not antagonize I. I activates specific receptors sited at the intramural parasympathetic ganglion cells.

IT **826-39-1**, 2-Norbornanamine, N,2,3,3-tetramethyl-, hydrochloride
(**intestine** response to, 5-hydroxytryptamine receptor site and)

RN 826-39-1 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

CC 68 (Pharmacodynamics)
IT **Intestines**
(3-(2-aminoethyl)indol-5-ol receptor site in)
IT Lysergamide, N,N-diethyl-, tartrate, D-
(**intestine** response to, 5-hydroxytryptamine receptor site and)
IT 114-28-3, Piperazinium, 1,1-dimethyl-4-phenyl-
(compds., **intestinal** response to, 5-hydroxytryptamine receptor site and)
IT 54-11-5, Nicotine
(**intestine** response to, 3-(2-aminoethyl)indol -5-ol receptor site in relation to)
IT 59-96-1, Benzylamine, N-(2-chloroethyl)-N-(1-methyl-2-phenoxyethyl)-
4004-43-7, Lysergamide, 2-bromo-N,N-diethyl-, tartrate
(**intestine** response to, 3-(2-aminoethyl)indol-5-ol receptor site and)
IT 51-45-6, Histamine 51-84-3, Choline, acetyl- 10012-47-2, Benzoic acid, p-amino-, 2-(dimethylamino)ethyl ester
(**intestine** response to, 3-(2-aminoethyl)indol-5-ol receptor site in relation to)
IT 52-62-0, Pyrrolidinium, 1,1'-pentamethylenebis[1-methyl-hydrogen tartrate] 60-26-4, Ammonium, hexamethylenebis[trimethyl-
371-86-8, Phosphorodiamidic fluoride, N,N'-diisopropyl- 546-48-5, Piperidine, 1,2,2,6,6-pentamethyl-, hydrogen tartrate
826-39-1, 2-Norbornanamine, N,2,3,3-tetramethyl-, hydrochloride 6779-86-8, Ammonium, trimethyl(2-phenoxyethyl)
(**intestine** response to, 5-hydroxytryptamine receptor site and)
IT 51-34-3, Scopolamine
(**intestine** response to, 5-hydroxytryptamine receptor site in relation to)